



2020-21

# CATALOG



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BTC is an EO/AA educator/employer.



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## COLLEGE OVERVIEW

Blackhawk Technical College delivers innovative education to enrich their diverse communities. The College is a center of education and training that is a catalyst for change in Rock and Green Counties, featuring future-driven educational delivery platforms and high-impact programs that improve lives.

The College builds futures by:

- Meeting students when and where they learn best, providing supportive services empowering them to succeed.
- Creating critical partnerships, adapting to the diverse needs of the community.
- Building an inclusive, aligned and supportive culture, allowing students and employees to develop, grow and succeed.
- Optimizing college resources to meet the needs of learners and employers through data-informed decisions and innovative solutions.
- Developing transparent, consistent, aligned and repeatable processes and procedures, focusing on efficiency, accountability, and excellence.

For more than 100 years, the College has offered a large assortment of associate degrees, technical diplomas, certificates, apprenticeships, and non-postsecondary offerings. In addition, the College now has more than 70 transfer agreements and 10 short-term career pathway certificates that can be completed in just one semester.

The College's long-term goal is to redefine the educational landscape, through flexible scheduling, a range of program offerings, partnerships with regional employers, and world-class facilities with high tech equipment – including some you won't find anywhere else in the state.

## History and Development

The State of Wisconsin established a Board of Vocational and Adult Education in 1911, six years before the use of federal funds for the promotion of vocational, technical, and adult education.

As a result of this law, the cities of Beloit and Janesville took the steps necessary to establish vocational schools in their communities. These two early schools formed the present technical college system district which now consists of Blackhawk Technical College.

In 1965, the State of Wisconsin enacted a law designed to broaden the vocational, technical, and adult education opportunities for youth and adults through the inclusion of the entire state into districts by July 1, 1970. The Beloit and Janesville schools, along with the major portions of Rock and Green Counties, were organized into a single system on July 1, 1968.

The reorganization in 1968 gave way for the creation of Blackhawk Technical Institute. In August 1987, along with the other 15 state technical institutes, Blackhawk Technical Institute became Blackhawk Technical College.

## Our Mission, Vision and Philosophy

### Our Mission:

We help you build your future with flexible education in a supportive environment.

### Our Vision:

Delivering innovative education to enrich our communities.

### Our Values:

These are the Guiding Principles that will guide our actions, activities, and decisions as a college:

- **Responsive:** Meeting students when and where they learn best, providing supportive services empowering them to succeed.
- **Collaborative:** Creating critical partnerships, adapting to community needs.
- **Empowering:** Building an inclusive, aligned and supportive culture, allowing students and employees to develop, grow and succeed.
- **Strategic:** Optimizing college resources to meet the needs of learners and employers through data-informed decisions and innovative solutions.
- **Process-driven:** Developing transparent, consistent, aligned and repeatable processes and procedures, focusing on efficiency, accountability, and excellence.

## Core Abilities

The College core abilities were developed to define the expectations of all graduates from Blackhawk Technical College programs, unifying all academic divisions and contributing to student success. Not only are core abilities expected outcomes for students, but they also reflect the expectations of all College staff as well.

Blackhawk Technical College has identified five core abilities that are crucial to success both during school and after graduation. These core abilities, based on input from faculty, employers, students, and other members of the community, are skills and competencies that will enable students to be successful in the workplace. These essential skills are taught across all programs and departments. Everyone at Blackhawk works toward improving and applying these critical skills.

Listed below are Blackhawk's five college-wide core abilities and their indicators.

### Demonstrate Critical Thinking

- Define problems clearly and precisely
- Utilize relevant information gathered from diverse perspectives
- Evaluate potential solutions using relevant criteria and standards

### Demonstrate Effective Communication

- Employ effective communication practices
- Adapt communication to engage diverse audiences
- Use technology to effectively communicate

**Demonstrate Professional Work Behaviors**

- Manage time effectively
- Adhere to policies, procedures, and safety protocols
- Demonstrate accountability

**Demonstrate Diverse and Inclusive Practices**

- Respond appropriately to diverse situations.
- Model respectful and inclusive interactions
- Acknowledge the contributions of a diverse society

**Demonstrate Professional use of Relevant Technology**

- Demonstrate proper selection of equipment, tools, and resources to produce desired results
- Demonstrate safe and secure use of technology
- Use occupational specific technology in appropriate ways

## College Facilities

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### Business Hours

The general operating hours of Blackhawk Technical College Central Campus are 7:30 a.m. to 10 p.m. Monday through Thursday; 7:30 a.m. to 5:00 p.m. Friday; and 8 a.m. to 1 p.m. Saturday. However, hours may vary for an individual department or division, outreach campuses or centers. In addition, hours are modified during the summer months. If in question, contact the department or campus/center to confirm their hours before your commute to that site. Visit us online at [www.blackhawk.edu](http://www.blackhawk.edu) (<https://blackhawk.edu/>)

### Locations

Blackhawk Technical College has been able to substantially upgrade all of its major facilities through community support over the past decade. All campuses are linked to each other by the BTC Shuttle system (<https://blackhawk.edu/Locations/>).

### Advanced Manufacturing Training Center

The Advanced Manufacturing Training Center (AMTC), a 105,000 square feet, state-of-the-art facility, is located in Milton:

15 Plumb St.  
Milton, WI 53563

The latest BTC campus opened in August 2014 and the second phase of construction was completed in August 2015. The facility is home to the Advanced Manufacturing division which provides Associate Degrees, Two-Year and One-Year Technical Diplomas and Certificates. Programs include Welding, Computer Numerical Control, Industrial Maintenance Technician, Information Technology, Manufacturing Information Technology Specialist, Electro-Mechanical Technology, Electrical Apprenticeship, and Heating, Ventilation, Air Conditioning and Refrigeration (HVAC/R). General Education classes required for these programs are also offered at the center.

The facility is 17.7 miles north of BTC's Central Campus and easily reached off Interstate 39-90 at the Hwy. 26, Milton, exit. Contact AMTC at (608) 757-7628.

### Center for Transportation Studies

The Center for Transportation Studies (CTS) is a 30,000 square-foot facility that houses two large shops for the Diesel and Heavy Equipment Technician and Automotive Technician programs and is located in Janesville:

1740 Hwy. 14  
Janesville, WI 53545

It features three classrooms, a library, a microcomputer lab, and a student lounge. CTS is about a quarter-mile west of the intersection of Highways 14 and 51. Parking is available with access off Hwy. 14. Contact the Center for Transportation Studies at (608) 743-4471.

### Central Campus

Blackhawk Technical College Central Campus is midway between Beloit and Janesville at:

6004 S. County Rd. G  
Janesville, WI 53547

Situated on over 80 acres of partially wooded prairie, the campus is home for most of BTC's programs and services. This comprehensive technical college facility comprises over 200,000 square feet and houses many program offerings with instructional classrooms and labs. The Central Campus also offers a technical library, media production, and telecommunications center, bookstore and food service with seating for 600. Seminar and teleconferencing facilities are also available.

A Student Center is available with offices for advising, admissions, registration, financial aid, veterans' affairs, and minority student services. Vocational and placement testing, career and professional development, and student activities are available through the new Student Success Center. Learning centers, also located at the Central Campus, provide pre-college individualized courses, skills brush-up, academic tutoring and services for students with disabilities.

Parking for approximately 1,200 vehicles, is available on the Central Campus, and bus service from Beloit and Janesville is also provided for students' convenience. Contact the Central Campus at (608) 758-6900.

### Monroe Campus

The Monroe Campus of Blackhawk Technical College is located just off Hwy. 11 at:

210 4th Ave.  
Monroe, WI 53566

This friendly, full-service and handicapped accessible campus has computer labs equipped with state-of-the-art computer equipment, a distance learning lab designed for global classroom connections, fully equipped medical assistant, phlebotomy and science labs, and general classrooms. The campus offers select associate degrees, one-year diplomas, and short-term certificates, as well as general education courses. A learning center offers GED/HSED, and pre-college courses and GED/HSED testing services. Continuing education courses covering a broad range of topics are offered each year at the campus. An advisor

provides students with academic advising, support and career planning assistance. Small class sizes and a personalized learning environment ensure the success of Monroe Campus students. Contact the Monroe Campus at (608) 328-1660.

## Parking

The Central Campus usually has adequate parking for everyone. Please observe parking restrictions as posted and park in marked parking stalls. Otherwise, you may park on a first-come, first-serve basis.

Overnight parking is not allowed without permission from College Security.

Parking for the disabled has been reserved at several locations. Only persons with a valid disabled license plate or handicapped placard issued by the Wisconsin Department of Motor Vehicles (DMV) may park in those spaces. The College cannot issue any kind of handicapped sticker.

There are some designated parking areas set aside for special purposes such as motorcycles and the Rock County Sheriff Office's personnel. There is no parking in crosswalks, driveways (unless otherwise posted) or on the paved areas adjacent to the buildings. These areas need to be kept open for emergency vehicles. Anyone parked in a restricted area without appropriate authorization may receive a parking citation issued by law enforcement.

On-site parking is available at the Center for Transportation Studies, Monroe Campus, and the Advanced Manufacturing and Transportation Center in Milton. The rules noted above also apply to these locations.

## College Accreditation

Blackhawk Technical College is accredited by the Higher Learning Commission (HLC). The HLC is a regional accreditation agency that accredits degree-granting institutions of higher education that are based in the 19-state North Central region of the United States. Institutions that HLC accredits are evaluated against HLC's Criteria for Accreditation (<http://policy.hlcommission.org/Policies/criteria-for-accreditation.html>), a set of standards that institutions must meet to receive and/or maintain accredited status.

Regional accreditation agencies are recognized by the U.S. Department of Education to accredit degree-granting colleges and universities. There are six regions of the U.S. in which regional agencies operate. The regional accreditation agencies have similar standards for accrediting colleges and universities.

Higher Learning Commission  
230 South LaSalle Street Suite 7-500  
Chicago IL 60604-1411  
800.621.7440  
[info@hlcommission.org](mailto:info@hlcommission.org)

## Programs Accreditation

- Accreditation Commission for Education in Nursing (ACEN)
- American Culinary Federation
- American Refrigeration Institute/Partnership for Air Conditioning, Heating, Refrigeration Accreditation

- Commission on Accreditation of Allied Health Education Programs (CAAHEP)
- Commission on Accreditation in Physical Therapy Education (CAPTE)
- Commission on Dental Accreditation/American Dental Association
- Department of Justice
- Joint Review Committee on Education in Radiologic Technology
- National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
- National Automotive Technicians' Education Foundation (NATEF)
- National Institute for Automotive Service Excellence (ASE)
- WI Department of Health Services

## State and Federal Compliance

### Equal Opportunity and Affirmative Action

The Blackhawk Technical College Board actively complies with all state and federal equal opportunity and affirmative action laws, rules, executive orders and policies, including Titles VI and VII of the Civil Rights Act, Title IX of the Educational Amendments Act of 1972, section 50A of the Rehabilitation Act of 1973, the Age Discrimination Acts of 1967 and 1975, the Equal Pay Act of 1973, the Civil Rights Restoration Act of 1987, the Americans With Disabilities Act of 1990 and the Civil Rights Act of 1991. It is the policy of the Blackhawk District not to discriminate on the basis of age, race, creed, color, religion, handicap, disability, marital status, sex, national origin, ancestry, arrest or conviction record, sexual orientation, political affiliation, genetic testing, or membership in the national guard, state defense force or any reserve component of the military forces of the United States or this state. The District prohibits discrimination against students in admission and/or participation in services, programs, courses, and facilities usage based upon race, color, creed, religion, sex, national origin, disability, ancestry, age, sexual orientation, pregnancy, marital status, or parental status. Inquiries regarding equal opportunity may be directed to:

Affirmative Action Officer  
6004 S. County Road G, P.O. Box 5009  
Janesville, Wisconsin 53547-5009  
(608) 757-7773

### Civil Rights Legislation

Services, financial aid and other benefits of Wisconsin Technical College System institutions are provided on a non-discriminatory basis as required by Civil Rights legislation.

Individuals applying for or receiving assistance through these colleges who believe that there has been any discrimination on the grounds of race, color, creed, sex, disability, national origin, sexual orientation, ancestry, age, pregnancy or marital status should file a written complaint.

If it is felt that this discrimination is on the part of the Wisconsin Technical College Board, the complaint should be sent to:

State Director  
Wisconsin Technical College Board  
310 Price Place, P.O. Box 7874  
Madison, Wisconsin 53707  
(608) 266-1207



If it is felt that the discrimination is on the part of Blackhawk Technical College, the complaint should be sent to:

Affirmative Action Officer  
Blackhawk Technical College  
6004 S. County Road G, P.O. Box 5009  
Janesville, Wisconsin 53547-5009  
(608) 757-7773

## Clery Act

The Clery Act is a consumer protection law that aims to provide transparency around campus crime policy and statistics. In order to comply with Clery Act requirements, colleges and universities must understand what the law entails, where their responsibilities lie, and what they can do to actively foster campus safety. For more information about the Clery Act visit [www.clerycenter.org](http://www.clerycenter.org). The Blackhawk Technical College Annual Safety and Security Report can be found at <https://blackhawk.edu/About/Safety-Security> (<https://blackhawk.edu/About/Safety-Security/>).

## Program Graduation and Persistence Rates

BTC is required by federal regulation to disclose information regarding program graduation and persistence rates. This information, as well as other materials about job opportunities and program placement rates, is available on BTC's website and in Student Services.

## Title IX

Title IX of the Educational Amendments of 1972 protects people from discrimination based on sex in education programs and activities that receive federal financial assistance. The College is bound by, and supports all applicable laws. The Title IX of the Higher Education Act of 1972 ensures the College does not discriminate on the basis of sex in its education programs and the Campus Sexual Violence Elimination Act (SAVE) of 2013 and Violence Against Women Reauthorization Act (WAWA) ensures that colleges and universities implement policies and programs to prevent sexual assault, dating violence, domestic violence, and stalking.

### What if something happened or I think something happened?

Students, staff and/or witnesses are encouraged to direct violence, harassment, assault, or other Title IX questions, concerns, and complaints to the Title IX Coordinator or an appropriate college employee who is available. If a Title IX Coordinator is alleged to be the person who engaged in discrimination or sexual misconduct, the report may be filed with another of the named officers or with the Office of the President, Central Campus. Financial aid and other benefits of Wisconsin Technical College System institutions are provided on a non-discriminatory basis as required by Civil Rights legislation. Find out more at (<https://public.blackhawk.edu/mybtc/StudentSuccessCenter/TitleIXStudentInformation.pdf>)t <https://blackhawk.edu/About/Safety-Security/Title-IX>.

Title IX Contacts:

Lynn Neitzel, Title IX Coordinator/Director of Teaching Support Services  
Central Campus Student Success Center, (608) 743-4508,  
[Ineitzel@blackhawk.edu](mailto:Ineitzel@blackhawk.edu)

Alicia Acker, Deputy Coordinator/Coordinator, Career Services and Leadership Development

Central Campus, Room 2209, (608) 743-4423, [aacker@blackhawk.edu](mailto:aacker@blackhawk.edu)

Complaints can also be filed with the Office of Civil Rights (OCR). The OCR encourages complaints to follow the College's process prior to filing a complaint with OCR; however, it is not required. Generally, complaints must be filed with OCR within 180 days of the alleged event. Complaints can be filed with OCR via email at [ocr@ed.gov](mailto:ocr@ed.gov) and by completing an electronic complaint form at <http://www2.ed.gov/about/offices/list/ocr/complaintintro.html>

## Sex Offender Registry

Federal law requires the College to provide information where students can obtain information about registered sex offenders in the state or community. The Wisconsin Sex Offender Registry is maintained by the Wisconsin Department of Corrections. Information is available on the department's website at <http://www.widocoffenders.org>.

Sex offender students who are required to register in a state must provide notice of the conviction to staff at the Office of Safety and Security at the time of enrollment or thereafter upon conviction. Sex offender registry information will be used for the protection of staff, students, and minors on campus.

## Important Dates

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### Summer 2020

Feb. 17, 2020: Summer Registration Opens for Veterans and Students with Documented Disabilities

Feb. 19, 2020: Summer Registration Opens for Current Blackhawk Students

Feb. 26, 2020: Summer Registration Opens for New Blackhawk Students

May 18, 2020: Summer Semester begins

May 23, 24, 25, 2020: College Closed in Observance of Memorial Day

June 26, 2020: Summer Midterm

July 3, 4, 5, 2020: College Closed in Observance of Independence Day

July 27, 2020: Summer Graduation Application Deadline

Aug. 10, 2020: Summer Semester ends

Aug. 12, 2020: Final Grades are Due

### Fall 2020

Apr. 6, 2020: Fall Registration Opens for Veterans and Students with Documented Disabilities

Apr. 8, 2020: Fall Registration Opens for Current Blackhawk Students

Apr. 15, 2020: Fall Registration Opens for New Blackhawk Students

Aug. 19, 2020: Fall Semester begins

Sept. 5, 6, 7, 2020: College Closed in Observance of Labor Day

Sept. 8, 2020: No Classes, College is Open

Oct. 15, 2020: Applications Due for Foundation Scholarships

Oct. 16, 2020: Fall Midterm

Nov. 21, 2020: Fall Graduation Application Deadline

Nov. 25, 2020: No Classes, College Closes at 5 p.m.

Nov. 26, 27, 28, 29, 2020: College Closed in Observance of Thanksgiving

Dec. 15, 2020: Fall Semester Ends

Dec. 17, 2020: Final Grades are Due

Dec. 24, 2020: Winter Break begins

Jan. 4, 2021: College Reopens

## Spring 2021

Oct. 26, 2020: Spring Registration Opens for Veterans and Students with Documented Disabilities

Oct. 28, 2020: Spring Registration Opens for Current Blackhawk Students

Nov. 4, 2020: Spring Registration Opens for New Blackhawk Students

Jan. 11: Spring Semester begins

Jan. 18: College Closed in Observance of Martin Luther King Jr. Day

Mar. 1: Spring Graduation Application Deadline to Participate in Commencement

Mar. 8 – 11: Spring Break, No Classes, College is Open

Mar. 12, 13, 14: College Closed

Mar. 17: Spring Midterm

Apr. 15: Applications Due for Foundation Scholarships

Apr. 17: Spring Graduation Application Deadline for Those Not Participating in Commencement

May 10: Spring Semester ends

May 12: Final Grades are Due

May 15: Commencement

Important financial aid deadlines, petition dates, events, professional development seminars and workshops, or even employer events can all be accessed year-round by going to the BTC Calendar (<https://blackhawk.edu/About/News-Events/Event-Calendar/>).

Add/drop dates are the first week of each semester. For more information, please see the Add/Drop section under Registration and Records in this catalog.

## Governing Catalog

All of Blackhawk's degree and certificate programs are described in full in this College Catalog. Students should read it carefully to learn the requirements and characteristics of each program.

In order to respond to emerging needs and remain current with technology and workplace expectations, Blackhawk's programs undergo changes. Generally, a student may graduate following the academic plan

established based on the program in place at the time of the student's initial enrollment. However, because of frequent program changes and the length of time taken by students to meet graduation requirements, the following policies will govern which academic plan will be used to define a student's graduation requirements.

1. The college can, after one (1) year of non-continuous enrollment, require the student to follow the most recent program curriculum in order to graduate. A new academic plan will need to be created with an Academic Advisor.
2. The college reserves the right to place a five (5) year limitation on accepting courses for graduation.
3. At any time, a student may elect to follow the most recent program curriculum, after meeting with an Academic Advisor to develop a new academic plan. Doing so ensures the college is notified of the student's intention to follow the new program curriculum. Students may not change back to a previous academic plan.
4. It is the student's responsibility to follow the academic plan under the chosen program curriculum and to ensure that all requirements for graduation will be met.
5. If a student changes his/her program at any time, the student will follow the governing catalog at the time of the change.
6. The college reserves the right to establish course substitutions when courses are inactivated to meet program curriculum requirements.

## ADMISSION

Education is the best return on investment you will ever receive.

A degree, certificate, technical diploma, apprenticeship or non-postsecondary offering (GED, HSED, ELL) from Blackhawk Technical College will increase your earning potential, enrich your life, enhance your skills, and broaden your perspective. Whether you're planning to step directly into a career, or transfer to a four-year institution, Blackhawk is the best place for you to start.

Blackhawk graduates leave college ready to take on the world and lead with integrity, honor and distinction. Since opening our doors more than 100 years ago, Blackhawk has continually hosted a breadth of opportunity with a wide range of offerings.

From day one, our focus will be on your individual academic and professional growth. We strive to blend classroom experiences with real-time, hands-on learning because our graduates tackle some of the world's toughest problems – from the skills gap, to helping rebuild southern Wisconsin. We teach. We explore and we discover. We innovate, inspire and empower. We achieve our potential and create circumstances that help our students and others achieve theirs.

For more information or to contact someone directly in the Blackhawk Admission Department, call (608) 757-7710.

## How to Apply

Blackhawk Technical College maintains an open-door admissions policy for all prospective students. This means that anyone may enroll in courses to learn new skills or improve existing skills. Admissions requirements vary from program to program, but generally include submitting the following materials:

### Application

- Application-Apply Online here. (<https://blackhawk.elluciancrmrecruit.com/Admissions/Pages/Welcome.aspx>)

### Transcripts

Official high school transcripts or GED/HSED certificate is required for admission to Blackhawk. Official college transcripts are only required to receive credit for prior learning and may be considered for course placement.

- Request official copies of all academic transcripts, including high school, GED, HSED, college or university. Contact each institution and ask to have your official transcripts mailed directly to the Admissions Office.
- Transcripts (<https://www.blackhawk.edu/Request-Transcripts/>) will be evaluated for credit transfer after you have been admitted to the college. This process may take up to 6 weeks.

### Acceptance

Once students submit the application and official high school transcripts or GED/HSED certificate students will be accepted to Blackhawk.

## Next Steps

### Placement Testing

Students complete a placement test and scores are used to determine appropriate course placement – students cannot fail the placement test. Blackhawk offers the Next-Generation Accuplacer assessment for FREE. Students will need to bring a photo ID with them when they test. If a re-test is necessary, a fee must be paid and a receipt must be presented prior to taking a test. Note: Blackhawk also accepts ACT/SAT scores to be used for course placement.

Next-Generation Accuplacer (<https://blackhawk.edu/Admissions/After-Youre-Accepted/Placement-Testing/>) is an untimed assessment taken on a computer that measures skills in reading, language usage, and numerical skills. Testing accommodations are available in the Student Success Center by calling (608) 743-4422, deaf/hh call Relay 711.

### Advising, Registration, and Orientation (ARO) Session

Once you have either submitted your ACT or SAT scores, or taken the placement exam, the next step is to attend an Advising, Registration and Orientation Session. The link to sign up for an ARO Session will be sent to your personal email in the acceptance letter. This ARO session will include meeting your advisor, reviewing your academic plan and registering for classes. Additional information regarding financial aid, payment plans, books, tools, and supplies will be discussed.

### Pay Tuition and Fees

Paying your tuition and additional fees can happen at any time during the registration process, however, many new students pay after they have registered for classes. If you need financial assistance, our Paying for College (<https://blackhawk.edu/Paying-for-College/>) page can provide you more information about financial aid (<https://blackhawk.edu/Paying-for-College/Financial-Aid/>), payment plans (<https://blackhawk.edu/Paying-for-College/Payment-Options-Due-Dates/>), scholarships (<https://blackhawk.edu/Paying-for-College/Scholarships-Awards/>) and other types of awards (<https://blackhawk.edu/Paying-for-College/Scholarships-Awards/>). Please note, you will not be able to attend class if you have not paid your tuition or set up a payment plan.

### Fast Track Days

Whether you already registered or still need to apply, join us during one of our **Fast Track Days**. These events are designed to help you get ready for the upcoming semester. Meet with faculty, get your student ID, purchase books, take a tour and learn about campus and community resources.

## Placement Testing/Assessment

*All steps must be completed to be accepted into Blackhawk.*

Students complete an admission placement test (<https://www.blackhawk.edu/Admissions/After-Youre-Admitted/Placement-Testing/>) as part of the application process to the college. These scores are utilized to determine appropriate course placement. Blackhawk offers the Next-Generation ACCUPLACER assessment for free, unless students have earned either an Associate Degree, Bachelor's Degree, or completed the ACT or SAT Exam. Any re-test fees must be paid and a receipt presented prior to taking a test.

Next-Generation ACCUPLACER is an untimed assessment taken on a computer that measures skills in reading, language usage, and numerical

skills. Accommodations for the Next-Generation ACCUPLACER are available in the Student Success Center by calling (608) 743-4422, deaf/hh call Relay 711. Testing Center hours may vary and are updated on the Blackhawk Technical College website (<https://blackhawk.edu/Admissions/After-Youre-Accepted/Placement-Testing/>).

## Next-Generation ACCUPLACER Retest Policy

Retesting is an option if students believe their scores do not accurately reflect their abilities and skill levels.

### Admission Retest:

- After reviewing the admission test scores, students may retest in each area once using Next-Generation ACCUPLACER.
- Students who have completed Next-Generation ACCUPLACER as part of the admission process MUST wait 48 hours after their first Next-Generation ACCUPLACER exam before retesting.
- There is a fee to re-test. For information contact the Testing Center at (608) 757-7666.

## Health Science Assessments

The programs listed below have additional assessment requirements for clinical readiness. Please see an Academic Advisor for program/clinical-ready requirements.

- Diagnostic Medical Sonography
- Medical Assistant
- Nursing Assistant
- Nursing
- Physical Therapist Assistant
- Radiography
- Surgical Technology

## Make-Up Testing

Make-up testing is a service provided for students who have been absent and are being allowed to complete an exam per the course instructor. A valid photo ID is required for all testing (i.e. state ID, driver's license, passport, student ID, other IDs approved by testing staff).

## Educational Agreements

A joint educational agreement exists between Rock Valley College (Rockford, IL), Highland Community College (Freeport, IL) and Blackhawk Technical College. These agreements expand the programs available to Blackhawk District residents. In addition, Blackhawk has a number of agreements with four-year colleges and universities.

The College is currently developing a University Center on Central Campus to make it easier and more affordable for Blackhawk students to pursue bachelor's degrees.

A list of approved programs is available in the Student Services Division on Central Campus or on the college website at [blackhawk.edu/Paying-for-College/Tuition-Fees/Educational-Agreements](https://blackhawk.edu/Paying-for-College/Tuition-Fees/Educational-Agreements).

## High School Partnerships

There are a lot of great reasons to consider taking college classes while you're still in high school. Worried about your college applications?

College classes make a standout addition to your high school transcripts. Thinking about heading into the workforce after high school? Taking college classes now could prepare you for the job market and may help you decide if more school is right for you.

If you're interested in a head start on your college degree, Blackhawk has options for you.

## High School Articulation

High school students have the opportunity to earn technical college credit while enrolled in high school, saving students (and parents) time and money while giving students a head start on their college degree. Articulation provides a smooth transition from high school to postsecondary education without the duplication of coursework.

Blackhawk Technical College and high schools in Rock and Green Counties provide opportunities for high school students to earn college credit through advanced standing or transcribed credit articulation agreements.

## Advanced Standing

High school students receive Blackhawk Technical College credit for high school courses with an advanced standing agreement after they are enrolled at Blackhawk. A student will receive credit if the student's final high school transcript shows the student received a final grade of 80% or better. This credit is entered in as non-graded transfer credit, meaning the student will not receive a grade, but will receive credits and not have to repeat the class at Blackhawk. Advanced standing classes are accepted at other institutions; whether or not students receive credit is determined by each individual receiving institution.

## Transcribed Credit

High school students receive Blackhawk Technical College credit for courses taken at their high school. These courses are taught by high school instructors who are also adjunct faculty for Blackhawk. Students are advised to check with their high school counselor or the Blackhawk Early College Specialist at (608) 757-6983 for articulation opportunities in their high school. For a complete list of courses offered by high school visit <https://blackhawk.edu/Programs-Classes/Start-College-in-High-School> (<https://blackhawk.edu/Programs-Classes/Start-College-in-High-School/>).

High school students receive Blackhawk Technical College credit for high school courses with a transcribed credit agreement when the student meets the requirements of the course and receives a final grade of 70% or better on the Blackhawk grade scale. The student will have a Blackhawk Technical College transcript with college credits and grades before they graduate from high school. Students are advised to check with their high school counselor or the Blackhawk Early College Specialist at (608) 757-6983 for articulation opportunities in their high school.

## Start College Now - College Credit for HS Students

Take college courses at Blackhawk while still in high school! This is a good way to get a head start on earning college credit and still earn credits for your high school diploma.

Start College Now eligibility requirements:

- You must be enrolled at a public high school and have completed 10th grade.
- You do not have a history of disciplinary problems and are not a "child-at-risk".
- You are in good academic standing, and meet course entry requirements.
- You have the written approval of your parent or guardian.
- You must notify your school district by March 1 for fall enrollment and October 1 for spring enrollment.

Talk to your high school counselor for more information.

## International Students

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Blackhawk Technical College welcomes international students and is authorized to issue I-20s for students attending under F-1 visas. Blackhawk is not authorized to issue I-20s to students for the study of the English language. International students are not considered Wisconsin residents and are required to pay out-of-state tuition. Requirements for admission include:

- Blackhawk Admissions Application (paper form, not online).
- TOEFL score of 500 (paper version), 173 (computer version) or 61 (Internet-based version) or better. If English is the native language in the applicant's home country, no proof of proficiency is required.
- Secondary and post-secondary transcripts must be evaluated by a credential evaluation service (such as WES, NACES, or ECE).
- Financial support verification.
- A deposit toward tuition for the program in which the student seeks to enroll.
- Students wishing to transfer - verification of good academic standing (Grades of C or better and a GPA of 2.0 on a 4.0 scale).
- Satisfactory placement test upon arrival at Blackhawk- Next-Generation Accuplacer or ACT.

Issuance of an I-20 is contingent upon meeting all admission requirements.

For additional information, contact the Enrollment Development Coordinator at (608) 743-4463.



# REGISTRATION AND RECORDS

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The Registration and Records Office is located on the Central Campus in Janesville. This section contains more information about the services provided by this area.

## Registration for Courses

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Currently enrolled Blackhawk students are provided priority registration before other students. Registering for classes can be done online or in person. Students are encouraged to register online using the MyBTC portal as course availability is first-come, first served. Newly admitted students are required to attend an Advising and Registration Orientation (ARO) prior to registering for their courses. Students will register for an ARO through a link that is sent to them in their acceptance letter.

Registering is the process of enrolling for specific classes. Students must be registered for all classes they attend. Registration is necessary in order for an official record to properly reflect a student's participation in educational activities.

A student does not have a guaranteed seat in a class unless all fees have been paid or a payment agreement has been established. It is the student's responsibility to keep informed of all registration requirements and procedures. By registering for courses, a student accepts the responsibility for all fees. Non-attendance does not constitute a cancellation of that obligation, nor does it officially withdraw a student from the class.

Continuing students will register for the next semester's classes before new students. This gives continuing students the first opportunity to enroll in the courses needed to complete program requirements. A registration schedule will be available to provide specific procedures to be followed, including the date and time of registration, estimated cost, and other applicable information. Students are strongly recommended to register on-line by using their MyBTC account.

## Online Registration

A student may register if he/she has been previously enrolled (within the last 185 days) or is currently enrolled and has a student identification number and password. To register online, go to <http://www.blackhawk.edu> (<https://www.blackhawk.edu/>). At the top of [blackhawk.edu](http://www.blackhawk.edu), click on the Online Services pull down from the main navigation, then select MyBTC. Once MyBTC is open, go to the Registration and Courses link to sign up for classes.

## A Note to New Students

New students must apply for admission at Blackhawk in order to set up an account to register online. Once an account set up is completed, a student ID number and password is required to activate the online account. This information, along with other important computer service materials, is included within each Blackhawk Acceptance Letter.

## In-Person Registration

In-person registration is available at the Central Campus and Monroe Campus during regular office hours.

## Registration by Mail

Complete the website registration form at <http://www.blackhawk.edu> (<http://www.blackhawk.edu/>). From the menu on the opening page, choose "Registering for Classes" in the STUDENTS section listed at the bottom of the page. Send the completed form with credit card information or a check made payable to Blackhawk Technical College for the exact amount of fees listed in the schedule. Send to:

Registration and Records Office  
Blackhawk Technical College  
P.O. Box 5009  
Janesville WI 53547-5009

## Registration by Fax

Dial (608) 743-4407 for Central Campus or (608) 329-8215 for Monroe Campus to fax a completed registration form along with a MasterCard, Visa or Discover card information. In order for Blackhawk to bill an employer, a letter of authorization for billing must be faxed with a registration form.

## Transfer and Credit for Prior Learning

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Blackhawk seeks to provide students with opportunities to obtain credit toward the completion of their technical college educational programming by providing credit for prior learning. In all cases, final determinations of credits earned are reached by the appropriate Division Dean or Division Administrator.

Students must complete at least 25% of the total program credits through coursework at Blackhawk. This shall include 25% of occupational core credits associated with the program from which the student will graduate.

If a student registers for a course for which the college later grants credit, students may choose to drop/withdraw from the course. Students are held responsible for all appropriate fees incurred.

## Transfer Credit

Credit for prior learning must be supported by official transcripts (in closed original envelopes and bearing the school seal). Transfer of credits can be evaluated from regionally and nationally accredited post-secondary institutions (where a "C" or better was earned) and, under certain circumstances, high school institutions (high school courses for which advanced standing was granted and a grade of "B" or better was earned). The College initiates this process upon your acceptance to the College. Once this process is complete, your Blackhawk transcripts will reflect grades of "TR" for all approved coursework. If students feel that specific coursework was not evaluated for transferability, it is the student's responsibility to provide the Registration and Records Office course descriptions from the appropriate college catalog along with a copy of the catalog's cover and/or a course syllabus. Once this information is received, the course(s) will be reviewed by the appropriate Division Dean. Students are notified of credits granted by email sent to the Blackhawk student email account.

## Credit for Military Training and Service

As a member of the military, students may be eligible for college credit based on the American Council of Education (ACE) credit recommendation and the applicability to the program. The credits

earned are for general electives required for an associate's degree only. Acceptance of credit by any college is at the discretion of the receiving college. It is the student's responsibility to obtain the necessary documentation (DD 214 and JST) for credits to be considered for transfer. Once the appropriate documentation is received, Blackhawk personnel will review military training and experience documents of former and currently enlisted U.S. Military personnel for the awarding of possible credits.

Please note: All communications regarding any type of Credit for Prior Learning will be sent to your Blackhawk email account.

## Credit for Work and Life Experience

When supported by adequate documentation, students may request awarding of credits based upon work or other experiences. It is the student's responsibility to initiate this process with his/her Advisor.

## Credit by Exam (Test Out)

Credit by exam includes Advanced Placement, College Level Exam Placement (CLEP), and Challenge Exams. When students have advanced high school courses or other undocumented or unaccredited experiences, Blackhawk offers them the opportunity to receive credit by examination. Students must meet with an Academic Advisor to discuss this option.

Click here for more information on the Credit by Exam (<https://blackhawk.edu/Admissions/Credit-for-Prior-Learning/Credit-by-Exam/>).

# Adding/Dropping Courses

## Adding a Course

Students may add courses online or in-person up until the start of the semester. Once a course begins, registration can only be processed in-person with an instructor's approval. When adding a course, all additional tuition and fees will need to be paid upfront or a payment plan must be established.

**DROP/ADD:** During the first week of the semester, students can drop a course and add a different course (or choose a different section of the same course). When dropping and adding at the same time, tuition from the dropped class is used to pay for the new class. After the first week of the semester, switching sections or adding classes requires approval from the instructor of the course. If there is a difference in cost, students are responsible for paying any additional fees at the time of registration.

## Dropping and Withdrawing a Course

Students are responsible for notifying the College when dropping a course. Dropping a course can impact a student's program status and completion timeline. Dropping a course may affect financial aid. If an agency or program is funding educational expenses, students may be required to have schedule changes approved by the agency or program staff. Students are responsible for all course fees not paid.

Courses can be dropped through the MyBTC portal before the first day of the semester or in the Registration and Records Office prior to the start of a course. When dropping a course, students may be eligible for a refund (see WTCS Refund Policy). Dropped courses are not listed on a student's transcripts. Refunds are directly deposited to accounts established in TouchNet or a check is mailed within two weeks.

After the add/drop period, students are able to withdraw from a course. Upon officially withdrawing, students will see a grade of "W" on their transcripts. Students cannot withdraw (a grade of "W" is recorded on the student's transcript and no tuition refund is available) from a course if 20 percent or less of the class remains. Students using financial aid are required to see the Financial Aid Office prior to withdrawing. It is highly recommended that students also see an advisor if withdrawing from a course. If students are seeking to withdraw from all courses, they must meet with an advisor to review their options. Courses cannot be dropped/withdrawn if an academic misconduct issue is pending.

The College may administratively drop a student from a course for which course requirements have not been met (i.e. pre-requisites, co-requisites, etc.) or if payment arrangements have not been made by the appropriate deadline. The College may administratively withdrawal a student from a course if a student is no longer attending and progressing.

## Course Scheduling

Students should refer to the academic plan that was created with an Academic Advisor during their Advising, Registration and Orientation (ARO) session. Following an academic plan will help keep students on track for program completion. Students should speak to their assigned Academic Advisor if they have questions about their academic plan or course schedule.

Blackhawk offers flexible education at various locations and times in an effort to better meet students' needs. When registering for classes, students should take note of the times, location and method of delivery for the classes.

## Flexible Learning

Blackhawk provides courses in alternative delivery formats:

### MyEdChoice

This option allows you to choose how you attend each class and does not lock you into one format. In a MyEdChoice class, you have the option to attend:

- in the classroom at a set class time,
- live during class time using video conferencing, or
- online at anytime

You can mix and match how you attend class or pick the option that works best for you. It's your choice.

### FlexLab

This option allows you to attend when it is most convenient for you, within the designated open lab hours. The non-lab instructional content is delivered face-to-face.

### Hybrid

Your course content is delivered in a blend of face-to-face and online classes. Because 40 to 60 percent of the content is delivered online, you will need access to a computer with a high-speed internet connection.

### Online

The entire course is delivered online, although proctored testing and assessment may be required. Because these courses are 100 percent

online, you will need regular access to a computer with a high-speed internet connection.

### Traditional

These courses typically meet several times a week over the course of a semester. Instructors meet face-to-face with students in a traditional classroom or laboratory setting.

### FlexLab Hybrid

The lab times are flexible times but must be done at the specified campus during lab hours. The non-lab instructional content is delivered online.

## Course Load

A full-time student carries between 12 and 18 credits. For enrollment verification purposes, 12 credits are considered full-time for students. Students electing to carry more than 18 credits in a semester must speak to their assigned advisor. Approval will depend on the student's scholastic record. Students considering enrolling in any classes at another college or university with concurrent registration at Blackhawk should consult with his/her advisor.

Course loads are defined as:

- Full-time is 12 or more credits
- Three-quarters time is 7 - 11 credits
- Half-time is 6 credits
- Less than half time is 5 credits or less

## Auditing Classes

Students may request the permission of the division dean to audit credit classes. The decision to audit must be made at the time of registration. Students taking a class for audit may not change to credit, nor may students change from credit to audit after the class begins. Students are only permitted to register to audit a course one week prior to the start of each semester. If a student repeats a course, it must be for credit and all course objectives must be met.

When auditing a class, students participate in the classwork, complete assignments, and meet the instructor's attendance requirements. Students with disabilities are expected to have a special adaptation plan in place which may waive some of the course requirements. Students will pay all of the regular tuition and fees for audited courses. However, no credit will be granted for the course. An "AU" will appear on the student's transcript as a grade for the course. Tuition will be waived for students 60 and older. However, all other fees will be charged.

## Pre-Requisites/Co-Requisites

Certain classes may require that students take particular courses prior to (pre-requisite) or in conjunction with (co-requisite) other classes. Students must successfully complete these courses in order to move forward in their selected program. A grade of "C" or higher is required for a pre-requisite. Some classes have more stringent requirements and students will be notified of these requirements through course syllabi.

Failure to obtain a "C" or higher in any pre-requisite courses will result in students being administratively dropped by the college from the course(s) that requires the pre-requisite. Students are notified of this

change through the Blackhawk student email. Charges on the student's BTC account for the course(s) being dropped will be reduced to zero.

## Information Changes

### Change of Name, Address and Phone Number

It is important that students update their personal information (i.e. name, address, and/or phone number). Blackhawk needs to have up-to-date information on file in the event of illness, emergency, the mailing of grade reports, etc. Students can change this information by selecting the "About Me" link located on the MyBTC homepage. Forms are available in Student Services or on MyBTC (student portal).

## Program Changes

### Changes/Verifying Program of Record

Students are able to change academic programs when and if career goals change. Students are required to meet with an Academic Advisor when selecting a different program. During this meeting, a new academic plan will be created and new program requirements are discussed. Students making more than two program changes are required to meet with an Academic Advisor and complete a career assessment. Once the career assessment has been completed, the student will have a follow-up appointment with an Academic Advisor to discuss those results and a program change will be made as appropriate.

Accuracy of a student's program of record is important. Not only can this affect financial aid eligibility, but it could also affect program completion and permanent student records. Students can verify their program of record through MyBTC or by contacting the Enrollment Services.

## Incomplete Coursework

A grade of "Incomplete" (I) may be assigned at the instructor's discretion when student coursework is of passing quality and represents a significant portion of the requirements for a final grade, but is incomplete for a good cause. A good cause may include illness, serious personal problems, an accident, a death in the immediate family, a large and necessary increase in working hours, or other situation of equal gravity. If these situations occur when 20 percent or more time remains in the class, students should consider withdrawing from the class. Students failing a course will not be granted an "Incomplete" to avoid receiving an "F."

It is the student's responsibility to maintain contact with the instructor and to turn in all required work within the designated time (not to exceed one semester, excluding summer, unless the "Incomplete" is granted due to activities related to military leave). Both parties must discuss the need for an "Incomplete", the process for completion of course requirements, and sign the "Incomplete Form." The "Incomplete Form" serves as an agreement and will guide the course(s) completion. If an "Incomplete" is granted at the end of the fall semester, students must complete it by the end of the spring semester. For spring or summer semesters, students must complete all requirements by the end of the following fall semester.

Any extensions beyond the maximum semester of allowed time must be initiated by the student for the instructor's consideration. The instructor will complete and submit a Grade Change form to the Registrar's Office

when all required work is complete. If not completed in the designated timeframe, a grade of "F" will automatically be awarded.

## Midterm Grades

Midterm grades are issued in an effort to provide students with early feedback about academic progress. Midterm grades are only available on the MyBTC portal after the eighth week of the semester; midterm grades are not mailed to students. Letter grades of "S" or "U" are issued. An "S" indicates that the student is currently performing at a "C" or higher in the course. A "U" indicates that the student is performing at a "C-" or lower in the course. Should this occur, it is advised that the student speak with the instructor. These grades are not recorded on student transcripts and are not used to compute grade point averages.

## Graduation

In order to graduate students must:

- Complete all necessary coursework.
- Have a college GPA of 2.0 or higher. Please note: some programs may require a higher GPA for graduation)
- Completed at least 25% of all program required courses at BTC.
- Complete the graduation application by the posted deadline for the academic year.

Students who do not meet the criteria identified and/or deadlines may not be able to participate in the formal ceremony and receipt the diploma will be delayed.

Students who previously submitted graduation applications that did not meet the graduation criteria must re-submit an updated application.

Students completing additional programs will need to complete a separate graduation application.

## Commencement

Commencement is held only once a year - typically in May - for students who meet the following requirements:

- Are within six (6) credits of completing a program (diploma or degree programs) which has twelve or more credits.
- Apply for graduation by the application deadline.
- Pay the cap and gown fee
- Wear caps and gowns for Commencement. Information regarding the purchase of the cap and gown will be provided in early spring
- If you are unsure at the time you apply to graduate whether you plan to attend the ceremony, we would encourage you to mark "yes". If you find out later you can no longer participate, send notification via [graduation@blackhawk.edu](mailto:graduation@blackhawk.edu).
- Students and guests requiring special accommodations must contact [graduation@blackhawk.edu](mailto:graduation@blackhawk.edu) at least two (2) weeks before Commencement.
- Commencement will be recorded.

## Honor Cords

The Honor Cord program recognizes graduating students who have a cumulative grade point average of 3.75 or above at the end of the semester prior to completing their program requirements. Qualifying

students will receive a complimentary gold cord that can be worn on the graduation gown recognizing this achievement of academic excellence. This honor is sponsored by Student Activity Fees. Those who qualify will be notified through the Blackhawk student email. For further information regarding the Honor Cord, contact the registrar at [registration@blackhawk.edu](mailto:registration@blackhawk.edu).

## Honors

### President's Honor List

The President's Honor List is published each fall and spring semester. The list includes the names of students maintaining a grade point average of 3.5 or higher and enrolled in nine (9) credits or more.

### Honors

Students receiving honors for a given semester where at least nine semester hours have been completed will have the following notation on their transcript:

- GPA between 3.5-3.99 will be notated as President's List
- GPA of 4.0 will be notated as High Honors

Graduates achieving Honors (3.5 or better) and High Honors (4.0) according to their program GPA are also recognized by a special notation on their diploma.

## Transcripts

There are two types of transcripts, official and unofficial. All "active" students have the ability to request an official transcript (Registrar's signature and school seal will appear) or to print an unofficial transcript via the MyBTC portal. Students are considered "active" if registered for a minimum of one course within the last year. "Inactive" students may request official transcripts from the transcript link on the BTC website. Students are charged \$7 per copy or \$14 per copy for same-day service for official transcript requests. BTC has retained Credentials Inc., to process all transcript orders. Students may order transcripts at [www.credentials-inc.com/tplus/?ALUMTRO005390](http://www.credentials-inc.com/tplus/?ALUMTRO005390) or by calling Credentials Inc., at (847) 716-3005 to place a request. There is an additional charge for placing orders over the telephone. Students with registration or account "holds" will not be able to obtain transcripts until the hold is resolved.

## Federal Educational Rights and Privacy Act (FERPA)

Blackhawk Technical College policy on the privacy of records and releasing information follows the directives outlined in FERPA, the federal law governing the protection of educational records. Registered students will be notified of this policy on an annual basis. Others can find the policy in the BTC Catalog, on the BTC website, or may obtain a copy of the policy upon request from the College.

Personally identifiable information will not be released from an education record without the prior written consent of the student unless an exception has been granted by FERPA (see exception section below).

## Rights under FERPA

FERPA affords students:

1. The right to inspect and review the student's education records within 45 days of the day the College receives a request for access.
2. You should submit to the Registrar written requests that identify the record(s) you wish to inspect. The Registrar will make arrangements for access and notify you of the time and place where the records may be inspected. At the time of viewing, the student will present some form of picture identification, such as a valid driver's license, before being allowed to view the record.
3. The right to request the amendment of the student's education records that the student believes is inaccurate or misleading.
4. You should write to the Registrar, clearly identifying the part of the record you want to be changed, and specify why it is inaccurate or misleading. If BTC decides not to amend the record as requested, the college will notify you of the decision and advise you of your right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to you when you are notified of the right to a hearing.
5. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent (see exception section below).
6. The right to file a complaint with the U.S. Department of Education concerning alleged failures of the College to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office

U.S. Department of Education

600 Independence Avenue, SW

Washington, D.C. 20202-4605

## Exceptions under FERPA

Under certain conditions, as authorized by FERPA, information can be released without student consent:

**Directory Information:** The use of the term "Directory Information" does not imply that the College actually has a document containing Student Directory Information, or that the College has any obligation to produce such a document. The term "Directory Information" is a legal term applying to that information that the College may release, without student consent, to any third party.

The College has defined "Directory Information" as the following:

- Student Name
- Student Address and Phone Number
- Date and Place of Birth
- Full-time or Part-time Status
- Major Field of Study
- Dates of Attendance

- Credits Earned Toward a Diploma
- Degrees and Awards Received
- Photos and Videos of Students for use in College Press Releases, Publications, and Websites
- BTC Assigned Student Email Accounts

Students have the right to restrict the disclosure of "Directory Information" at any time. To restrict the disclosure of Directory Information, a student may file a Privacy Request Form to the Registration and Records Office on Central or Monroe Campuses. The request to restrict disclosure of Directory Information will be honored until the student notifies the Registration and Records Office in writing to the contrary.

**U.S. Military:** According to federal law, the College must release to the U.S. Armed Forces student name, address, phone number, date of birth, and field of study.

**Authorized Federal, State, and Local Authorities:** Student authorization is not required for disclosure to an authorized representative of the following individuals or entities:

- The Secretary of the U.S. Department of Education
- State educational authorities
- Any party legitimately connected with a student's application for, or receipt of, financial aid
- Accrediting organizations
- Agencies involving an audit or evaluation of compliance with education programs
- Organizations conducting studies for or on behalf of educational institutions

**Other Institutions:** Information can be released to other schools to which a student seeks or intends to enroll.

**Emergency Situations:** Information can be released to law enforcement personnel, emergency personnel, and College officials in an emergency in order to protect the health or safety of students or other persons.

**Legitimate Educational Interest:** Officials of the College who have a legitimate educational interest may have access to student records without obtaining consent from the student. Officials of the College are defined as:

- Persons employed by the school in an administrative, supervisory, academic, research or support staff position.
- Persons serving on school governing bodies.
- Persons employed by or under contract to the College to perform a specific task, such as an attorney or an auditor.

An official has a legitimate educational interest if s/he needs to:

- Perform duties specified in their job description or under terms of a contractual agreement.
- Provide campus services related to a student, such as advising or financial aid.
- Conduct tasks related to a student's education or campus discipline.

**Judicial Order:** Information must be released to comply with a judicial order or lawfully issued subpoena. However, the College will make a



reasonable effort to notify the student of the order or subpoena in advance of compliance, so that the student may seek protective action. However, if the court (or other issuing agency) has ordered that the existence or the contents of the subpoena or judicial order not be disclosed, the College will comply and notification to the student will be withheld.

Grievance Hearing: Information about a student or students involved in grievance investigation or grievance hearing may be released to members of the grievance committee, including any students assigned to that committee, if such information is germane to the investigation or hearing.

Disciplinary Hearing: The results of a disciplinary hearing may be released to an alleged victim of a crime of violence without the permission of the accused.

Blackhawk Technical College Foundation: Student names and addresses may be released to the Blackhawk Technical College Foundation for foundation-related activities. The Foundation is considered part of the College and will hold such information confidential, using the information only in specific activities intended to aid and support the College. The release of such information to the Foundation will be made only with the approval of the College President or his/her designees.

U.S. Patriot Act: The College must release, without consent or knowledge of the students personally identifiable information from a student's education record to the Attorney General of the United States or his/her designee in connection with the investigation or prosecution of terrorism crimes specified in sections 233b (g)(5)(B) and 2331 or Title 18 U.S. Code.

Written Release: Personal employed by the College who have consent in the form of a written release of information, signed by the student, and may disclose student information to the appropriate outside agencies of persons.

Note: A record of disclose will be maintained within a student's file indicating when information has been released from that file and to whom. A fee of five dollars may be assessed for the copying of all or a portion of a student record.

## **Student Identification Number and FERPA**

As of January 1, 2000, Wisconsin Act 128 limits the disclosure and release of student Social Security Numbers. In order to comply with Act 128, BTC assigns a unique identification number to each student. This identification number does not incorporate the student's Social Security Number. BTC may collect and report student Social Security Numbers for state and federal reporting requirements. BTC procedures are designed to ensure that student Social Security Numbers remain confidential.

# PAYING FOR COLLEGE

Paying for tuition is a significant concern for many students. Blackhawk Technical College continually strives to help students who have financial need. The following offices or groups are available to assist students to overcome the challenge of paying for college.

- Financial Aid (<https://www.blackhawk.edu/Paying-for-College/Financial-Aid/>)
- Blackhawk Foundation (<https://www.blackhawk.edu/About/Foundation/>)
- Veterans Educational Benefits (<https://www.blackhawk.edu/Paying-for-College/Veterans-Benefits/>)

This section aims to provide students with an overview of fees and billing, financial aid options, scholarship possibilities, and educational benefits for veterans. For more information please visit <https://blackhawk.edu/Paying-for-College/Financial-Aid/> (<https://blackhawk.edu/Paying-for-College/Financial-Aid/>).

## Student Consumer Information

Schools are required to provide a variety of Consumer Information to students. This includes information such as Campus Crime and Safety Disclosure, Drug and Alcohol Abuse Prevention Program, Placement/Employment statistics, and Retention and Graduation Rates. The Student Consumer Information can be found on the Blackhawk website under College Information, Student Consumer Information.

## Tuition and Fee Payment

### Standard Tuition and Fees

All programs are subject to a uniform fee per credit established by the Wisconsin Technical College System Board and state legislature. The rate is subject to change. Certain unique courses and programs are exempt from program fees.

The 2020-2021 Wisconsin tuition rate is **\$138.90** per credit hour (***please note, other fees may apply to this amount***). The out-of-state tuition rate is \$208.35 per credit hour.

For a complete listing of costs, please see the program cost sheet (<https://www.blackhawk.edu/Paying-for-College/Tuition-Fees/Cost-by-Program/>).

Students can pay their tuition and fees using one of the four methods below:

- 1. Pay in Full:** Pay the full amount of tuition and fees by cash, check, MasterCard, VISA, or Discover at the time of registration.
- 2. Tuition Payment Plan available using TouchNet (available in the MyBTC student portal):**
  - All payment plans require a non-refundable service charge. Students will be billed for outstanding balances. If payments are not made, a hold will be placed on the student's account. Such holds can impact a student's ability to register, get official transcripts, diplomas, or access to Learning Resources until they are resolved.

- Failure to make the payments at the time that they are due may cause the student to be dropped from all of their pre-college and credit courses for that semester. Students may re-register for classes should this happen; however, they may not be allowed to establish another payment plan for that semester.

**3. Financial Aid:** Students must have their financial aid awarded by completing the Free Application for Federal Student Aid (FAFSA). Once the student has received their financial aid notification from Blackhawk, they can defer payment of their tuition and fees. Their outstanding balance will be paid as the financial aid is received. If financial aid does not cover the entire balance due, the student will be responsible for payment of the balance due.

**4. Agency/Employer Funding:** If written authorization from an agency or employer is on file, the student will be able to defer payment of tuition and fees. The agency/employer will be billed for the authorized costs. If the funding does not cover the entire amount of tuition and fees, the student will be responsible for paying the remaining balance.

**Collection Issues:** If you are late paying the outstanding balance, a hold will be placed on your account. You will not receive official transcripts or diplomas, and will not be allowed to register for additional classes until all balances are paid. Starting thirty-one (31) days into the semester, a 30-day notice and possibly a 60-day notice will be sent to remind you of an outstanding balance. Failure to make payment after receiving the notification(s) will result in a late charge of \$25.00 being assessed to your account. In addition to the late charge, your account may be referred to a collection agency or for legal action. In an effort to receive payment, the collection agency will be authorized to notify the State of Wisconsin's Tax Refund Intercept Program.

## Out-of-State Tuition

Students who do not reside in Wisconsin and enroll in a program that is not covered under one of Blackhawk's reciprocity agreements will pay tuition and fees at a higher rate. A limited number of waivers may be granted. Paperwork for waivers is available in Student Services. Visit our website for more information on out-of-state tuition and fees (<https://www.blackhawk.edu/Paying-for-College/Tuition-Fees/>).

## Financial Assistance

There are four basic types of financial aid available for Blackhawk students:

- Grants (<https://blackhawk.edu/Paying-for-College/Financial-Aid/Grants/>)
- Loans (<https://blackhawk.edu/Paying-for-College/Financial-Aid/Loans/>)
- Part-time employment
- Scholarships (<https://blackhawk.edu/Paying-for-College/Scholarships-Awards/>)

The type of financial aid provided will differ for each student because the aid package is designed specifically for the student's individual needs and circumstances. A single type of financial aid rarely meets all educational expenses. Therefore, financial assistance generally comes in the form of a combination of financial aid. Students are encouraged

to learn more about the different financial aid options by clicking on the links above.

In addition, there is assistance available to veterans and members of the military. A variety of programs are available if you have served in the military or are in the Reserves or National Guard. Dependents of disabled or deceased veterans may be eligible for benefits also. Military spouses may also be eligible for education benefits. For the latest information about Veterans education benefits through the Federal Department of Veteran Affairs (i.e. Montgomery GI Bill, Post 9/11 Bill), go to [www.gibill.va.gov](http://www.gibill.va.gov) (<http://www.gibill.va.gov>) or call (888) 442-4551.

For more information about veteran/military financial assistance call (608) 757-7664 or visit <https://blackhawk.edu/Paying-for-College/Veterans-Benefits/>.

#### Student Consumer Information

Schools are required to provide a variety of Consumer Information to students. This includes information such as Campus Crime and Safety Disclosure, Drug and Alcohol Abuse Prevention Program, Placement/Employment statistics, Gainful Employment and Retention and Graduation Rates. The Student Consumer Information can be found on the BTC website under College Information, Student Consumer Information.

### Disbursement of Financial Aid

All financial aid is disbursed through the Accounting Office. If the combination of grants and loans exceeds tuition and fees, a refund will be issued to you. For dates of refunds, visit the college calendar on the website (<https://blackhawk.edu/About/News-Events/Event-Calendar/>).

### Book Charge Information

Bookstore charges allow a student to charge their books to their excess financial aid at the BTC Bookstore. Bookstore charges are available a week before school starts and goes two weeks into the semester. For more information on bookstore charges please go to <https://www.blackhawk.edu/paying-for-college/financial-aid> (<https://www.blackhawk.edu/Paying-for-College/Financial-Aid/>).

### Return of Title IV Financial Aid

Federal Law states that if you receive Federal Financial Aid and withdraw, drop-out, stop attending or receive failing grades in your classes, you may have to return some Federal Aid that you received. Failure to attend classes may require you to repay 100% of all the aid you received for the classes you did not attend. To view the Return of Title IV policy for Blackhawk Technical College please go to <https://www.blackhawk.edu/paying-for-college/financial-aid> (<https://www.blackhawk.edu/Paying-for-College/Financial-Aid/>).

### Satisfactory Academic Progress

Students receiving financial aid must make Satisfactory Academic Progress (SAP) toward the completion of course requirements. To view the SAP policy for Blackhawk Technical College, please go to <https://www.blackhawk.edu/paying-for-college/financial-aid> (<https://www.blackhawk.edu/Paying-for-College/Financial-Aid/>).

## Helpful Websites

- <http://www.studentaid.gov> (<http://www.studentaid.ed.gov/>) – Federal Student Aid – An Office of the US Department of Education
- <http://www.studentaid.gov> (<http://www.fafsa.gov/>) – Website to complete your Financial Aid Application
- <https://fsaid.ed.gov/npas/index.htm> (<https://fsaid.ed.gov/npas/>) – Website to set up your user name and password for Financial Aid Website
- [https://nslds.ed.gov/nslds/nslds\\_SA/](https://nslds.ed.gov/nslds/nslds_SA/) – Website to view Student Loan amounts and Pell Usage

## Applying for Financial Aid

Applying for financial aid can be completed months before the start of the academic year by completing a Free Application for Federal Student Aid (FAFSA) online. FAFSA determines a student's eligibility for assistance. Students re-apply each year as information does not carry over from year-to-year. The earlier the application is completed, the more opportunities there may be for certain types of financial assistance. FAFSA application period for the 2020-2021 academic year opens on October 1, 2019.

Here are instructions for applying for financial aid:

1. Create a username and password at <https://fsaid.ed.gov/npas/index.htm> (<https://fsaid.ed.gov/npas/>).
2. Submit your Free Application for Federal Student Aid (FAFSA) at <https://studentaid.gov/h/apply-for-aid/fafsa> (<https://studentaid.gov/h/apply-for-aid/fafsa/>)
  - The application for the new school year becomes available October 1 every year.
  - For priority processing, complete the FAFSA by February 1 every year.
  - School ID – 005390
  - FAFSA must be completed for every school year.

Students are welcome to stop by the Financial Aid Office on Central Campus for assistance. Assistance at other campus locations is available by appointment. please contact Financial Aid to schedule.

If you have any questions or need help filling out the FAFSA, call the Financial Aid Office at (608) 757-7664 or toll-free at (800) 498-1282 ext. 7664.

## Blackhawk Technical College Foundation Scholarships

The Blackhawk Technical College Foundation offers a number of scholarships to help students pay for their education. Scholarship opportunities are available based on a variety of criteria and students are invited to apply by **October 15 and April 15** each year. Scholarships are awarded based on merit, financial need and the answer to scholarship application questions.

Some scholarships have specific program enrollment or other requirements; however, all students, regardless of program-of-study, are eligible for scholarship funding through the BTC Foundation.

Only one application, unless stated otherwise, needs to be completed in order to be eligible for all Foundation scholarships. The scholarship application can be found by visiting <https://www.blackhawk.edu/About/Foundation/Foundation-Scholarships> (<https://www.blackhawk.edu/About/Foundation/Foundation-Scholarships/>).

## Veterans and Military Benefits

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### Federal Department of Veteran Affairs

A variety of programs are available if you have served in the military or are in the Reserves or National Guard. Dependents of disabled or deceased veterans may be eligible for benefits also. Military spouses may also be eligible for education benefits. For the latest information about Veterans education benefits through the Federal Department of Veteran Affairs (i.e. Montgomery GI Bill, Post 9/11 Bill), go to [www.gibill.va.gov](http://www.gibill.va.gov) (<http://www.gibill.va.gov/>) or call (888) 442-4551.

### WI Department of Veteran Affairs

State programs in the form of tuition and fee reimbursement may be available for Wisconsin veterans. National Guard members may be eligible for the National Guard Tuition Grant. For more information about Wisconsin Veteran education benefits, go to <http://dva.state.wi.us> (<http://dva.state.wi.us/>) or call Rock County Veteran Service Office at (608) 757-5552 or Green County Veteran Service Office at (608) 328-9415.

### Veteran Benefits at Blackhawk Technical College

Once you have determined you are eligible to receive veteran education benefits and you would like to use them at Blackhawk Technical College, you must:

- Notify the College VA Certifying Official of the benefits you are eligible to receive and your intent to use them at Blackhawk
- Be accepted into and attending courses in a program approved for veteran benefits
- Be taking courses within your degree requirement
- Maintain academic progress within your program of study

For more information call (608) 757-7664.

# ACADEMIC PROGRAMS

Since opening our doors more than 100 years ago, BTC has continually hosted a breadth of opportunity for students to earn Associate Degrees (p. 25), Technical Diplomas (<http://catalog.blackhawk.edu/academics/technical-diplomas/>), Certificates (p. 77), apprenticeships (p. 82) and non-postsecondary offerings (p. 80).

- Accounting (p. 25)
- Accounting Assistant (p. 73)
- Administrative Professional (p. 25)
- Administrative Support Professional (p. 56)
- Advanced EMT (p. 56)
- Agribusiness Specialist (p. 56)
- Agribusiness/Science Technology (p. 26)
- Automation Systems Technology (p. 27)
- Automotive Technician (p. 57)
- Behavior Technician (p. 28)
- Business Management (Associate Degree) (p. 29)
- Business Management (<http://catalog.blackhawk.edu/academics/certificates/business-management/>) Specialist (p. 73)
- Central Service Technician (p. 58)
- Computed Tomography (p. 77)
- Computer Numeric Control (CNC) Technician (p. 59)
- Computer Service Technician (p. 60)
- Criminal Justice Studies (p. 30)
- Culinary Arts (p. 31)
- Culinary Production Specialist (p. 61)
- Dental Assistant (p. 61)
- Diagnostic Medical Sonography & Vascular (p. 32)
- Diesel & Heavy Equipment Technician (p. 62)
- Digital Marketing (p. 33)
- Early Childhood Education (p. 34)
- Electric Power Distribution (p. 63)
- Electromechanical Technology (p. 34)
- Emergency Medical Technician (p. 64)
- Entry Maintenance Technician (p. 73)
- Farm Business & Production Management (p. 64)
- Fire Protection Technician (p. 36)
- Flux Core Arc Welding (p. 74)
- Foundations of Teacher Education (p. 37)
- Funeral Service (p. 38)
- Gas Metal Arc Welding (p. 74)
- Gas Tungsten Arc Welding (p. 74)
- Heating, Ventilation, Air Conditioning, and Refrigeration Technology (p. 65)
- Human Resources (p. 38)
- Human Resource Generalist (p. 77)
- Human Services Associate (p. 39)
- Individualized Tech Studies (p. 40)
- Industrial Maintenance Mechanic (p. 66)

- IT- Network Specialist (p. 40)
- Laboratory Food Science Technician (p. 43)
- Laboratory Technician Assistant (p. 67)
- Law Enforcement Basic Jail Academy (p. 77)
- Law Enforcement Basic Recruit Academy (p. 67)
- Law Enforcement Secure Juvenile Detention Academy (p. 78)
- Leadership Development (p. 43)
- Manufacturing Information Technology Specialist (p. 68)
- Medical Administrative Coder (p. 44)
- Medical Administrative Specialist (p. 45)
- Medical Assistant (p. 69)
- Medical Laboratory Technician (p. 46)
- Nuclear Technology (p. 47)
- Nursing (p. 48)
- Nursing Assistant (p. 70)
- Patient Service Specialist (p. 77)
- Phlebotomy Technician (p. 70)
- Physical Therapist Assistant (p. 49)
- Project Management (p. 78)
- Radiation Safety/Health Physics (p. 50)
- Radiography (p. 50)
- Residential HVAC (p. 74)
- Sales Management (p. 51)
- Shielded Metal Arc Welding (p. 75)
- Substance Abuse Education (p. 75)
- Substance Use Disorder Counseling (p. 52)
- Supply Chain Management (p. 53)
- Supply Chain Management (Certificate (p. 78))
- Surgical Technology (p. 54)
- Technical Studies - Journeyworker (p. 54)
- Truck Driving (p. 70)
- Web Software Developer (p. 42)
- Welding (p. 71)

## Associate Degrees

- Accounting (p. 25)
- Administrative Professional (p. 25)
- Agribusiness/Science Technology (p. 26)
- Automation Systems Technology (p. 27)
- Behavior Technician (p. 28)
- Business Management (p. 29)
- Criminal Justice Studies (p. 30)
- Culinary Arts (p. 31)
- Diagnostic Medical Sonography & Vascular (p. 32)
- Digital Marketing (p. 33)
- Early Childhood Education (p. 34)
- Electro-Mechanical Technology (p. 34)
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- Foundations of Teacher Education (p. 37)
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- Human Resources (p. 38)
- Human Services Associate (p. 39)
- Individualized Technical Studies (p. 40)
- IT-Network Specialist (p. 40)
- IT-Web Software Developer (p. 42)
- Laboratory Food Science Technician (p. 43)
- Leadership Development (p. 43)
- Medical Administrative Cod (p. 44)er (<http://catalog.blackhawk.edu/academics/technical-diploma/medical-admin-coding/>)
- Medical Administrative Specialist (p. 45)
- Medical Laboratory Technician (p. 46)
- Nuclear Technology (p. 47)
- Nursing (p. 48)
- Physical Therapist Assistant (p. 49)
- Radiation Safety/Health Physics (p. 50)
- Radiography (p. 50)
- Sales Management (p. 51)
- Substance Use Disorder Counseling (p. 52)
- Supply Chain Management (p. 53)
- Surgical Technology (p. 54)
- Technical Studies - Journeyworker (p. 54)

## Technical Diplomas

- Administrative Support Professional (p. 56)
- Advanced Emergency Medical Technician (p. 56)
- Agribusiness Specialist (p. 56)
- Automotive Technician (p. 57)
- Central Service Technician (p. 58)
- Computer Numeric Control (CNC) Technician (p. 59)
- Computer Service Technician (p. 60)
- Culinary Production Specialist (p. 61)
- Dental Assistant (p. 61)
- Diesel & Heavy Equipment Technician (p. 62)
- Electric Power Distribution (p. 63)
- Emergency Medical Technician (p. 64)
- Farm Business & Production Management (p. 64)
- Heating, Ventilation, Air Conditioning, and Refrigeration Technology (p. 65)
- Industrial Maintenance Mechanic (p. 66)
- Laboratory Science Technician Assistant (p. 67)
- Law Enforcement Basic Recruit Academy (p. 67)
- Manufacturing Information Technology Specialist (p. 68)
- Medical Assistant (p. 69)
- Nursing Assistant (p. 70)
- Phlebotomy Technician (p. 70)
- Truck Driving (p. 70)
- Welding (p. 71)

## Embedded Technical Diplomas

- Accounting Assistant (p. 73)
- Business Management Specialist (p. 73)
- Entry Maintenance Technician (p. 73)
- Flux Cor Arc Welding (p. 74)
- Gas Metal Arc Welding (p. 74)
- Gas Tungsten Arc Welding (p. 74)
- Residential HVAC (p. 74)
- Shielded Metal Arc Welding (p. 75)
- Substance Abuse Education (p. 75)

## Certificates

- Computed Tomography (p. 77)
- Human Resource Generalist (p. 77)
- Law Enforcement - Basic Jail (Corrections) Academy (p. 77)
- Patient Service Specialist (p. 77)
- Project Management (p. 78)
- Secure Juvenile Detention Academy (p. 78)
- Supply Chain Management (p. 78)

At Blackhawk, we understand our students have busy lives and hectic schedules which is why the college offers a variety of flexible learning options to best serve you. Whether you are searching for an online class, a flexible lab schedule, or face-to-face courses, we want to do everything possible to accommodate you. BTC provides the following learning options:

## MyEdChoice

This option allows you to choose how you attend each class and does not lock you into one format. In a MyEdChoice class, you have the option to attend:

- in the classroom at a set class time,
- live during class time using video conferencing, or
- online at anytime

You can mix and match how you attend class or pick the option that works best for you. It's your choice.

## FlexLab

This option allows you to attend when it is most convenient for you, within the designated open lab hours. The non-lab instructional content is delivered face-to-face.

Click here (<https://blackhawk.edu/Programs-Classes/Take-a-Class/Flexible-Learning-Options/#Flex%20Lab%20Hours>) to see the current flex lab hours.

## **Traditional**

These courses typically meet several times a week over the course of a semester. Instructors meet face-to-face with students in a traditional classroom or laboratory setting.

## **Online**

The entire course is delivered online, although proctored testing and assessment may be required. Because these courses are 100 percent online, you will need regular access to a computer with a high-speed internet connection.

## **Hybrid**

Your course content is delivered in a blend of face-to-face and online classes. Because 40 to 60 percent of the content is delivered online, you will need access to a computer with a high speed internet connection.

## **FlexLab Hybrid**

The lab times are flexible times but must be done at the specified campus during lab hours. The non-lab instructional content is delivered online.

## ASSOCIATE DEGREES

These programs provide day and evening educational opportunities at the two-year applied associate degree level. Applied associate degree programs at Blackhawk are developed to assist those preparing for, or advancing in, an occupation. The degree is awarded for the successful completion of a program primarily intended for employment. About 30% of the course work is in general education; the remaining 70% is in technical studies.

The general education courses and some occupational credits earned in applied associate degree programs may transfer to a two- or four-year institution of higher education. Students interested in transferring credits should review Blackhawk's current transfer agreements <https://www.blackhawk.edu/Programs-Classes/Transfer-After-BTC/> (<https://www.blackhawk.edu/Programs-Classes/Transfer-After-BTC/>).

### Accounting

*Associate Degree*  
*10-101-1*

The Associate of Applied Science degree in Accounting prepares its graduates for entry-level positions in a variety of business enterprises. The Accounting program is designed to build a solid foundation in accounting principles, theories, and practices. Program objectives focus on the study of financial, managerial, and tax accounting theory and procedures along with developing intellectual, interpersonal, and communication skills. Over the course of study students develop the ability to apply generally accepted accounting principles, make sound and ethical decisions, and use common business and accounting software.

### Program Outcomes

- Prepare financial statements and related schedules in conformity with generally accepted accounting principles.
- Apply accounting skills and principles creatively and innovatively in accordance with the standards of professional ethics.
- Process financial transactions throughout the accounting cycle.
- Analyze financial and business information to support planning and decision-making.
- Perform payroll preparation, reporting, and analysis tasks.
- Perform cost accounting preparation, reporting, and analysis tasks.
- Perform individual and/or organizational tax accounting preparation, reporting, and analysis tasks.
- Identify internal controls to reduce risk.

### Graduates Have Found Employment As

- Accounts Payable/Receivable Clerk
- Payroll Clerk
- Accounting Clerk
- Assistant Accounting Manager
- Accountant
- Accounting Assistant
- Cost Accountant
- Plant/Branch Accountant

View the entire course listing (p. 85).

Semester 1		Credits
101-111	Accounting I	4
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
801-136	English Composition 1	3
102-148	Introduction to Business and Management	3
103-138	Word Documents	2
Credits		15
Semester 2		
101-112	Accounting II	4
101-130	Accounting Information Systems	3
101-135	Payroll Accounting	2
101-136	Computerized Accounting	2
103-107	Intermediate Excel	2
801-198	Speech	3
Credits		16
Semester 3		
101-113	Corporate Accounting	4
101-123	Income Tax Accounting	4
809-198	Introduction to Psychology	3
809-143	Microeconomics	3
Credits		14
Semester 4		
101-124 or 101-134	Applied Income Tax or Accounting Internship	2
101-150	AIPB Certified Bookkeeper Review	3
101-125	Cost Accounting	4
103-126	Introduction to QuickBooks	1
103-178	Advanced Microsoft Excel	2
102-130	Business Finance and Budget Management	3
Credits		15
Total Credits		60

### General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-143	Microeconomics	3
809-198	Introduction to Psychology	3

### Administrative Professional

*Associate Degree*

*10-106-6*

Businesses depend on high-quality, accurate information. If you value organization, care about details, and understand the importance of clear communication and current technology skills, developing those talents as an administrative professional may be just what you need to succeed.

The Administrative Assistant program prepares individuals in the software/hardware, administrative, and interpersonal skills needed to perform the duties of administrative support personnel. With additional education and/or work experience, there is opportunity for advancement into supervisory or managerial positions.

## Program Outcomes

- Demonstrate effective workplace communications
- Apply technology skills to business and administrative tasks
- Perform routine administrative procedures
- Manage administrative projects
- Maintain internal and external relationships
- Model professionalism in the workplace

## Graduates Have Found Employment As

- Administrative Assistant/Secretary
- Administrative Support
- Desktop Publisher Specialist
- Information Coordinator
- Information Processing Specialist
- Office Assistant
- Office Support
- Program Assistant
- Project Coordinator
- Receptionist
- Secretary
- Transcriptionist
- Word Processor

Do Not Use		Credits
801-136	English Composition 1	3
801-198	Speech	3
804-134	Mathematical Reasoning	3
809-143 or 809-122	Microeconomics or Intro to American Government	3
809-198	Introduction to Psychology	3
	Credits	15
	Total Credits	15

Semester 1		Credits
102-148	Introduction to Business and Management	3
104-100	Social Media Marketing 1	1
106-127	Administrative Office Communications	3
103-138	Word Documents	2
103-129	Intro to MS Publisher & Desktop Publishing	1
801-136	English Composition 1	3

103-132	Intro to Adobe Illustrator & Typography	1
103-133	Intro to Photoshop - Designing and Editing	1
203-131	Intro to Digital Photography & Color	1
	Credits	16
<b>Semester 2</b>		
104-102	Marketing Principles	3
104-101	Social Media Marketing 2	1
103-107	Intermediate Excel	2
106-142	Customer Service Essentials	1
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
103-134	Intro to InDesign & Layout	1
201-100	Graphic Design 1	1
201-101	Graphic Design 2	1
201-102	Graphic Design 3	1
	Credits	14
<b>Semester 3</b>		
102-109	Business Careers Planning and Communication	3
104-112	Social Media Marketing 3	1
101-111	Accounting I	4
196-193	Human Resource Management	3
106-144	Meeting and Event Planning	2
801-198	Speech	3
	Credits	16
<b>Semester 4</b>		
102-155	Introduction to Project Management	3
101-135	Payroll Accounting	2
103-126	Introduction to QuickBooks	1
106-147	Administrative Office Management 1	1
809-198	Introduction to Psychology	3
809-143 or 809-122	Microeconomics or Intro to American Government	3
106-150	Administrative Office Management 2	1
106-148	Administrative Professional Internship	1
	Credits	15
	Total Credits	61

## Agribusiness/Science Technology

*Associate Degree*  
*10-006-2*

The Agribusiness/Science technology focus of this program gives students the skills needed to run their own agribusiness operation or help other agricultural producers become more successful. Students will learn

how to merge business and science to produce a product and make a profit. Through hands-on learning and on-the-job experience, students gain skills in animal science and nutrition, integrated pest management, soil science, crop production and precision agriculture. Students develop crop management, livestock management, and business plans as well as learn how to enhance success through sales, marketing and business management. This program will provide opportunities in a variety of agribusiness career pathways.

## Program Outcomes

- Create a crop management plan
- Develop an agri-business management plan
- Apply economic and marketing strategies to agribusiness industry
- Apply relevant technologies
- Create a livestock management plan
- Investigate opportunities in agribusiness
- Interact as a professional in agribusiness

## Graduates Have Found Employment As

- Sales Representative
- Service Representatives
- Farm Manager
- Agricultural Technician
- Crop Associate
- Assistant Herdsman
- Agricultural Equipment Operator
- Commercial Applicator
- Precision Ag Technician
- Crop, Nursery, and Greenhouse Worker
- Crop and Livestock Manager
- Animal Breeders
- Nutrient Management Specialist
- Crop Scouting Technician

Semester 1		Credits
006-102	Emerging Agriculture Technologies	2
006-116	Introduction to Soils	3
102-148	Introduction to Business and Management	3
006-201	Career Development in Agriculture	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
006-101	Contemporary Issues in Sustainability	1
006-108	Commercial Drivers Training	1
Credits		16
Semester 2		
006-105	Nutrient Management	3
006-107	Pest Management:Applicator Training	3
006-160	Introduction to Plant Science	3
006-180	Introduction to Animal Science	3

801-198	Speech	3
006-103	Agricultural Commodity Marketing	1
Credits		16
Summer between year 1 and year 2		
006-197	Agribusiness Internship	3
Credits		3
Semester 3		
006-165	Livestock Nutrition	3
006-181	Crop Management	3
104-102	Marketing Principles	3
809-198	Introduction to Psychology	3
801-136	English Composition 1	3
Credits		15
Semester 4		
006-164	Livestock Management	3
006-166	Precision Agriculture Technologies	3
104-104	Selling Principles	3
809-143 or 809-196	Microeconomics or Introduction to Sociology	3
006-162	Farm Records and Business Management	3
Credits		15
Total Credits		65

## General Education Courses Within Program

Code	Title	Credits
809-198	Introduction to Psychology	3
801-136	English Composition 1	3
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-143 or 809-196	Microeconomics Introduction to Sociology	3

## Automation Systems Technology

10-664-1

### Associate Degree

As a graduate of the Automation Engineering Technology associate's degree program, you'll be prepared to design, program, and troubleshoot integrated machine systems used in the growing field of advanced manufacturing and industrial controls. Students in this program work with integrated systems that include industrial automation, robotics, mechanical systems, computer integration, and industrial communications. Potential career opportunities include automation technician, controls technician, controls designer, and engineering technician.

### 1. Perform work safely

- Follow established safety policies and practices (e.g. OSHA, MSHA, Arc Flash, site specific)



- Employ proper job specific Personal Protective Equipment
- Apply safety procedures, tools, and instruments based on specific situations
- Follow Lock-out/Tag-out procedures

## 2. Troubleshoot electrical and mechanical systems and devices

- Follow logical troubleshooting practices
- Utilize appropriate test equipment
- Use appropriate documentation to troubleshoot situations
- Determine corrective action

## 3. Communicate technical information

- Interpret documentation of automation control systems
- Create electrical diagrams and mechanical drawings, and control documentation for automation control systems
- Revise electrical diagrams and mechanical drawings, and control documentation for automation control systems
- Document problems and solutions

## 4. Integrate automation and mechanical control systems

- Integrate industrial devices utilizing communication protocols
- Modify designs as needed to build integrated systems
- Integrate an industrial controller with at least two automated components (e.g. sensors, PLCs, HMI, fluid power, actuators, industrial robotics, vision systems, electrical control, electrical safety systems, industrial communication systems, motors/controls)
- Select industrial component(s) for application

Semester 1		Credits
804-113	College Technical Mathematics 1A	3
620-902	Mechanics of Learning for Industrial Technologies	1
449-425	Safety	1
620-903	Troubleshooting Integrated Manufacturing Systems 1	1
620-173	Blueprint Reading for Machine Prints	1
620-146	Mechanics 1	1
620-147	Mechanics 2	1
620-109	Relay Logic	1
620-116	Fluid Power 1: Basic Pneumatics	1
620-117	Fluid Power 2: Basic Hydraulics	1
620-101	Fundamentals of DC circuits 1	1
620-102	Fundamentals of DC Circuits 2	1
620-106	Electric Motors 1	1
Credits		15

Semester 2		Credits
804-114	College Technical Mathematics 1B	2
801-136	English Composition 1	3
444-124	Basic CAD - Solidworks and AutoCAD	1
664-010	CAD - Electrical Design	1
620-113	Fundamentals of AC Circuits 1	1

620-114	Fundamentals of AC Circuits 2	1
620-910	Electric Motors 2	1
620-107	Variable Speed Drives 1	1
620-911	Variable Speed Drives 2	1
620-124	Programmable Logic Controllers - PLCs	1
620-134	Sensors	1
620-111	Programming Fundamentals 1	1
620-112	Programming Fundamentals 2	1
Credits		16

## Semester 3

806-154	General Physics 1	4
809-196	Introduction to Sociology	3
620-131	Solid State Devices 1	1
620-132	Solid State Devices 2	1
620-121	Programmable Automation Controllers (PACs) 1	1
620-122	Programmable Automation Controllers (PACs) 2	1
620-141	Process Control 1	1
620-142	Process Control 2	1
620-175	Servomechanisms 1	1
620-913	Servomechanisms 2	1
620-126	Robotics 1	1
Credits		16

## Semester 4

801-197	Technical Reporting	3
809-198	Introduction to Psychology	3
664-011	Machine Vision Systems	1
620-127	Robotics 2	1
620-144	Human Machine Interfaces (HMI)	1
620-914	Supervisory Control and Data Acquisition (SCADA) Systems	1
664-012	Industrial Networks	1
620-908	Maintenance Management	1
620-909	Lean Manufacturing	1
664-013	Automation Systems Integration	1
620-915	Troubleshooting Integrated Manufacturing Systems 2	2
Credits		16
Total Credits		63

# Behavior Technician

## Associate Degree

### 10-522-3

This program was developed to meet the growing special needs population in both Rock and Green counties. This program bridges between the Foundations of Teacher Education, Early Childhood Education, and Human Services programs adding courses targeted more towards working with and supporting the special needs population at all

ages. This program allows more options to people wanting to work with the special needs population.

- Discriminate between the various diagnoses collectively known as Pervasive Developmental Disorders.
- Analyze the impact of early intervention on children with Autism Spectrum Disorder.
- Implement positive behavior supports students identified on the Autism Spectrum.
- Foster play and friendship for persons with Autism Spectrum Disorder.
- Demonstrate a variety of effective teaching methods, adaptations and modifications for learners identified on the Autism Spectrum.
- Examine functional living skills and vocational support for persons with Autism Spectrum Disorder.

Semester 1		Credits
801-136	English Composition 1	3
103-138	Word Documents	2
307-151	ECE: Infant & Toddler Development	3
522-107	EDU: Overview of Special Education	3
520-101	Community Resources and Services	3
103-107	Intermediate Excel	2
Credits		16
Semester 2		
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
809-198	Introduction to Psychology	3
307-187	ECE: Children with Differing Abilities	3
522-142	Autism: Spectrum Disorder	3
Credits		15
Semester 3		
809-172	Introduction to Diversity Studies	3
522-106	EDU: Child & Adolescent Development	3
520-102	Introduction to Gerontology	3
520-108	Children and Family Services	3
522-145	Autism: Teaching Methods	3
522-150	Practicum 1: Group Home	1
Credits		16
Semester 4		
809-188	Developmental Psychology	3
522-124	EDU: Supporting Students with Disabilities	3
520-103	Interviewing Principles & Documentation	3
522-153	Applied Behavior Strategies, Assessments, and Intervention	3
522-147	Autism: Transition / Beyond	3

522-151	Practicum 2: Education Setting	1
Credits		16
Total Credits		63

Do Not Use		Credits
801-136	English Composition 1	3
801-198	Speech	3
804-134	Mathematical Reasoning	3
809-198	Introduction to Psychology	3
809-172	Introduction to Diversity Studies	3
Credits		15
Total Credits		15

## Business Management

*Associate Degree*

*10-102-3*

The Associate of Applied Science degree in Business Management prepares students for entry-level careers in business-related occupations and to start their own business. The training provides broad and foundational business skills in managing business operations, including marketing, finance, human resources, accounting, project management, team leadership, business technologies, and business communications. The program emphasizes the five functions of management: planning, organizing, staffing, directing, and controlling. General Education supporting outcomes include written, oral and interpersonal communications, mathematics, economics, and psychology.

## Program Outcomes

- Plan the operations of a business across functional areas.
- Organize resources to achieve the goals of the organization.
- Direct individuals and/or processes to meet organizational goals.
- Control business processes.

## Graduates Have Found Employment As

- Assistant Store Manager
- Branch Manager
- Buying and Planning Specialists
- Customer Service Manager
- Department or District Manager
- Distribution Center Manager
- Entrepreneur/Owner
- General Management Occupations
- Human Resources
- Shift Managers
- Store and Operations Specialties Managers
- Team Leaders

View the entire course listing (p. 85).

Semester 1		Credits
102-148	Introduction to Business and Management	3
104-102	Marketing Principles	3
103-128	Introduction to Microsoft Office Suites	2
801-198	Speech	3
801-136	English Composition 1	3
	Credits	14
Semester 2		
102-109	Business Careers Planning and Communication	3
102-115	Management Principles	3
809-143	Microeconomics	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
196-193	Human Resource Management	3
	Credits	15
Semester 3		
102-120	Small Business Management	3
101-111	Accounting I	4
102-160	Business Law	3
102-155	Introduction to Project Management	3
103-107	Intermediate Excel	2
102-122 or 804-189	Business Sustainability Planning or Introductory Statistics	3
	Credits	18
Semester 4		
102-121	Customer Service Management	3
102-127 or 102-128	Business Management Internship or Business Plan and Entrepreneurship	3
102-130	Business Finance and Budget Management	3
102-150	Global Business Fundamentals	3
809-198	Introduction to Psychology	3
	Credits	15
	Total Credits	62

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-143	Microeconomics	3
809-198	Introduction to Psychology	3

## Criminal Justice Studies

*Associate Degree*  
*10-504-5*

Persons interested in careers in criminal justice will receive theoretical and practical information in the program. Criminal justice is becoming increasingly complex and important. Today's criminal justice employees must be trained to meet the challenges of our changing society. The Criminal Justice Studies Program courses, as well as support and general education courses, will prepare the student for a position as a law enforcement officer (state, county, municipal), correctional officer, juvenile detention officer, police dispatcher, or many other occupational areas in the criminal justice system.

## Program Outcomes

- Examine the components of and interrelationships in the criminal justice system
- Analyze situational responses
- Apply communication skills as a criminal justice professional
- Conduct investigations
- Adhere to the professional code of ethics for a criminal justice practitioner
- Maintain personal wellness

## Graduates Have Found Employment As

- Eligibility to apply to law enforcement officer certification academy (police office and deputy sheriff)
- County Correctional Officer
- Juvenile Detention Officer
- Group Home Worker
- Community Juvenile Diversion Worker
- Case Manager (Halfway House)
- Private Security Officer
- State Prison Correctional Officer

View the entire course listing (p. 85).

Semester 1		Credits
504-922	The Criminal Justice System	3
504-923	Criminal Procedure	3
504-926	Juvenile Justice System	3
809-198	Introduction to Psychology	3
801-198	Speech	3
	Credits	15
Semester 2		
504-924	Substantive Criminal Law	3
504-925	Interview and Interrogation	3
520-114	Victimology	3
809-196	Introduction to Sociology	3
801-136	English Composition 1	3
	Credits	15

**Semester 3**

504-910 or 504-929 or 504-939	Introduction to Corrections or Policing and Crime Prevention or Juvenile Offenders and Family	3
504-911	Peacekeeping in a Diverse Society	3
504-921	Drugs, Society, Criminal Justice	3
504-927	Introductory Report Writing	3
809-159	Abnormal Psychology	3
Credits		15

**Semester 4**

504-928	Criminal Investigation Strategies	3
504-938 or 504-941	Patrol Procedures or Community Corrections	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
504-940 or 999-999	Juvenile Residential Services or Elective	3
504-950 or 999-999	Introduction to Forensic Science or Elective	3
Credits		15
Total Credits		60

**General Education Courses Within Program**

Code	Title	Credits
801-136	English Composition 1	3
809-159	Abnormal Psychology	3
809-188	Developmental Psychology	3
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3

**Culinary Arts**

Associate Degree  
10-316-1

The Culinary Arts program combines elements of artistry, science and business skills to prepare students for an exciting career in Food Service. Students will study principles of food preparation, quantity production, equipment layout and operation management. Students are involved in preparation and serving experiences in the food service lab and receive additional opportunities in catering, ice sculpting and food presentation. The Culinary Arts program at Blackhawk Technical College has been honored by the Wisconsin Technical College System (WTCS) board with the Exemplary Educational Service Award. The Blackhawk Technical College Culinary Arts Program is accredited by the American Culinary Federation.

**Program Outcomes**

- Enforce health and safety standards.
- Demonstrate food prep skills.

- Apply principles of nutrition.
- Recommend or modify business procedures to meet changing needs.
- Manage food purchases, storage, inventory and cost control.
- Supervise and assist in the development of employees.
- Design and implement menus.

**Graduates Have Found Employment As**

- Kitchen Manager
- Executive Sous Chef
- Executive Chef
- Restaurant Manager
- Lead Cook
- Kitchen Supervisor

View the entire course listing (p. 85).

Semester 1	Credits
316-103 Food Service Industry and Menu Design	2
316-104 Food Quantities and Measures	1
316-108 Food Science I	3
316-109 Quantity Production of Soups, Salads, and Dressings	4
316-147 Food Service Sanitation	2
804-134 or 804-118 Mathematical Reasoning or Intermediate Algebra with Applications	3
801-136 English Composition 1	3
Credits	18
Semester 2	
316-114 Quantity Production of Entrees, Sauces and Vegetables	4
103-128 Introduction to Microsoft Office Suites	2
316-115 Nutrition	2
316-149 Culinary Supervision	3
801-198 Speech	3
102-148 Introduction to Business and Management	3
Credits	17

Semester 3	
316-107 Culinary Internship	1
316-119 Baking For Chefs	3
316-125 Beverage Management	1
316-164 Global Cuisine	2
531-102 Emergency Procedure-Work Place	1
809-172 Introduction to Diversity Studies	3
809-198 Introduction to Psychology	3
Credits	14

Semester 4	
316-131 Advanced Cuisine	2
316-136 Catering, Special Events and Contract Food Service	2

316-142	Ice Sculpturing and Decorative Food Display	2
316-159	Food Purchasing , Inventory and Cost Control	2
316-160	Contemporary Stocks and Sauces	3
316-165	Contemporary Cuisine	3
	Credits	14
	Total Credits	63

## General Education Courses Within Program

Code	Title	Credits
809-172	Introduction to Diversity Studies	3
801-136	English Composition 1	3
801-198	Speech	3
804-134	Mathematical Reasoning	3
809-198	Introduction to Psychology	3

## Diagnostic Medical Sonography & Vascular

Associate Degree  
10-526-5

Diagnostic Medical Sonography, commonly called ultrasound, is a diagnostic medical procedure that uses high frequency sound waves to produce medical images of organs, tissues, or blood flow inside the body.

The profession of diagnostic medical sonography includes general sonography, cardiac sonography, vascular technology, and various subspecialties. The profession requires critical thinking and good judgment to provide appropriate health care services. Sonographer/vascular technologists are highly skilled professionals qualified by education to provide patient services using diagnostic techniques under the supervision of a physician. Although most sonographers work in hospital based medical imaging departments performing abdominal, pelvic and vascular examinations or cardiology departments performing cardiac and vascular examinations, sonographer are also employed in dedicated vascular departments or obstetric departments, where specialized ultrasound examinations are performed and many sonographers work outpatient clinics and mobile imaging services.

## Program Outcomes

- Obtain, review and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results.
- Perform appropriate procedures and record anatomic, pathologic and/or physiologic data for interpretation by a physician.
- Record, analyze, and process diagnostic data and other pertinent observations made during the procedure for presentation to the interpreting physician.
- Exercise discretion and judgment in the performance of sonographic and/or other non-invasive diagnostic services.
- Demonstrate appropriate communication skills with patients and colleagues.
- Act in a professional and ethical manner.

- Provide patient education, relative to medical ultrasound and/or other non-invasive diagnostic vascular techniques, and promote principles of good health.

View the entire course listing (p. 85).

Courses taken before semester 1		Credits
526-130	Introduction to Diagnostic Medical Sonography	2
526-132	DMS Clinical 1	2
806-139	Survey Of Physics	3
801-136	English Composition 1	3
	Credits	10
Semester 1		
526-131	DMS General Procedures 1	4
526-134	DMS Clinical 2	2
526-136	DMS Physics I	3
806-177	General Anatomy and Physiology	4
526-205	DMS Vascular 1	2
	Credits	15
Semester 2		
526-133	DMS General Procedures 2	4
526-137	DMS Clinical 3	2
526-139	DMS Physics 2 Instrumentation	2
806-179	Advanced Anatomy and Physiology	4
526-206	DMS Vascular 2	2
	Credits	14
Summer between year 1 and year 2		
526-135	DMS General Procedures 3	3
526-140	DMS Clinical 4	1
801-198	Speech	3
	Credits	7
Semester 3		
526-138	DMS General Procedures 4	4
526-142	DMS Clinical 5	2
806-175	General Pathophysiology	3
526-245	DMS Vascular 3	3
	Credits	12
Semester 4		
526-144	DMS Clinical 6	2
526-145	DMS Registry Review	2
809-198	Introduction to Psychology	3
809-196	Introduction to Sociology	3
526-246	DMS Vascular 4	1
526-247	DMS Capstone Seminar	1
	Credits	12
	Total Credits	70



## General Education Courses Within Program

Code	Title	Credits
806-139	Survey Of Physics	3
806-175	General Pathophysiology	3
806-177	General Anatomy and Physiology	4
806-179	Advanced Anatomy and Physiology	4
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3
801-136	English Composition 1	3
801-198	Speech	3

## Digital Marketing

Associate Degree  
10-104-8

The Digital Marketing program explores aspects of the digital marketing age, including topics such as digital marketing analytics, SEO, social media marketing, mobile marketing and promotional design. When you complete the Digital Marketing program you will have a richer understanding of the foundations of the digital marketing landscape and acquire a set of skills, concepts, and tools to help you digitally create, distribute, and promote products and services.

Throughout this program, you will gain digital marketing skills including:

- Mobile Marketing Strategies
- Social Media Campaigns
- Audio/Video Recording and Editing
- Digital Design Concepts
- Search Engine Optimization (SEO)
- Google Analytics
- Responsive Web Design
- Basic Coding for Marketers
- Policies, Laws, and Ethics
- Adobe Photoshop, Illustrator, InDesign, Premiere, Dreamweaver, and Muse

## Program Outcomes

1. Develop digital marketing strategies to anticipate and satisfy market needs
2. Create digital marketing content for products, services, images, and ideas
3. Integrate tools and technology for digital marketing initiative
4. Analyze the effectiveness of marketing outcomes

## Graduates Have Found Employment As

1. Marketing Assistant
2. Marketing Specialist
3. Sales/Marketing Representative
4. Account Manager
5. Social Media Specialist

### 6. Email Marketing Processor

Semester 1		Credits
102-148	Introduction to Business and Management	3
104-102	Marketing Principles	3
104-100	Social Media Marketing 1	1
801-136	English Composition 1	3
103-129	Intro to MS Publisher & Desktop Publishing	1
103-132	Intro to Adobe Illustrator & Typography	1
203-131	Intro to Digital Photography & Color	
103-133	Intro to Photoshop - Designing and Editing	1
103-138	Word Documents	2
Credits		15
Semester 2		
101-111	Accounting I	4
104-101	Social Media Marketing 2	1
104-124	Advertising and Branding	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
103-107	Intermediate Excel	2
103-134	Intro to InDesign & Layout	1
201-100	Graphic Design 1	1
201-101	Graphic Design 2	1
201-102	Graphic Design 3	1
Credits		17
Semester 3		
104-104	Selling Principles	3
104-112	Social Media Marketing 3	1
104-114	Integrated Marketing Communications 1	1
104-116	Integrated Marketing Communication 3	1
104-120	Introduction to e-commerce 1	1
104-121	Introduction to e-commerce 2	1
104-122	Introduction to E-Commerce 3	1
801-198	Speech	3
104-115	Integrated Marketing Communication 2	1
103-135	Dreamweaver 1	1
103-136	Dreamweaver 2	1
103-137	Dreamweaver 3	1
Credits		16
Semester 4		
102-155	Introduction to Project Management	3
104-123	Marketing Research	3
104-127	Marketing Plan Development 1	1

104-128	Marketing Plan Development 2	1
104-129	Marketing Plan Development 3	1
104-137	Digital Marketing Internship	1
809-198	Introduction to Psychology	3
809-143 or 809-122	Microeconomics or Intro to American Government	3
Credits		16
Total Credits		64

## General Education Courses Within Program

Code	Title	Credits
801-195	Written Communication	3
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-143	Microeconomics	3
809-198	Introduction to Psychology	3

## Early Childhood Education

Associate Degree  
10-307-1

The Early Childhood Education program prepares students to work as teacher-caregivers in early childhood settings. It combines hands-on fieldwork in area centers with related academic work at the college. Graduates become responsible for the care and education of children in the birth-to-eight-years age range. They create and maintain safe and healthy play environments, guide behavior, plan and implement learning activities, and work cooperatively with staff and parents.

Early Childhood Education is a career option that has increased in demand. This expanding field is seeking potential students with keen observation skills, a talent for human insight, clear communication skills, and respect for children and families. Early Childhood Associate Degree graduates will meet the state educational requirements to be a Child Care Teacher in a licensed group early childhood center for children ages 2 weeks to 10 years old.

## Program Outcomes

- Apply child development theory to practice.
- Cultivate relationships with children, family, and the community.
- Assess child growth and development.
- Use best practices in teaching and learning.
- Demonstrate professionalism.
- Integrate health, safety, and nutrition practices.

## Graduates Have Found Employment As

- Nannies
- Nursery Schools
- Day Care Centers
- Head Start Classrooms
- Infant Toddler Center
- Before & After School Child Care Centers

- Instructional Services Aide in public schools
- Early Childhood Centers Administration positions

View the entire course listing (p. 85).

## General Education Courses Within Program

Semester 1		Credits
307-148	ECE: Foundations of Early Childhood Education	3
307-167	ECE: Health, Safety, and Nutrition	3
307-151	ECE: Infant & Toddler Development	3
307-174	ECE: Introductory Practicum	3
801-136	English Composition 1	3
Credits		15

Semester 2		Credits
307-179	ECE: Child Development	3
307-188	ECE: Guiding Children's Behavior	3
307-108	ECE: Early Language & Literacy	3
307-110	ECE: Social Studies, Art & Music	3
307-177	ECE: Intermediate Practicum	3
Credits		15

Semester 3		Credits
307-187	ECE: Children with Differing Abilities	3
307-175	ECE: Preschool Practicum	3
801-198	Speech	3
804-118 or 804-134	Intermediate Algebra with Applications or Mathematical Reasoning	4
307-112	ECE: STEM	3
Credits		16

Semester 4		Credits
307-195	ECE: Family and Community Relationships	3
307-199	ECE: Advanced Practicum	3
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3
999-999	Elective	3
Credits		15
Total Credits		61

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
804-118 or 804-134	Intermediate Algebra with Applications Mathematical Reasoning	4
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3

## Electro-Mechanical Technology

Associate Degree  
10-620-1

Students who complete the Electro-Mechanical Technology associate's degree will be ready to install, maintain, and repair integrated machine systems. This associate's degree program includes coursework in basic mechanics, fluid power, welding, industrial electrical systems, automation controls, and integrated manufacturing systems. Potential career opportunities include maintenance technician, automation technician, installation technician, field service technician, and related professions in the field of mechatronics.

## Program Outcomes

- Perform work safely (TSA)
- Troubleshoot electrical and mechanical systems and devices  
Integrates safety protocol. (TSA)
- Repair electrical and mechanical systems (TSA)
- Communicate Technical Information (TSA)
- Integrate electrical and mechanical systems and devices (TSA)
- Operate power and hand tools and standard test equipment
- Diagnose a fault condition in a component or system
- Modify systems and components.
- Interpret specifications of schematics and procedure documentation

## Graduates Have Found Employment As

- Maintenance Technician
- Automation Technician
- Installation Technician
- Field Service Technician
- Medical Electronics Technician
- Pharmaceutical Process Technician
- Electronics Process Technician
- Robotics Technician
- Programmable Controller Program/Technician
- Field Service Technician
- Electronic Service Technician
- Maintenance Service Technician
- Fluid Power Technician
- Machine Repair Technician
- CNC Service Technician

View the entire course listing (p. 85).

Semester 1		Credits
804-113	College Technical Mathematics 1A	3
620-902	Mechanics of Learning for Industrial Technologies	1
449-425	Safety	1
620-903	Troubleshooting Integrated Manufacturing Systems 1	1
620-173	Blueprint Reading for Machine Prints	1
620-146	Mechanics 1	1
620-147	Mechanics 2	1
620-116	Fluid Power 1: Basic Pneumatics	1
620-117	Fluid Power 2: Basic Hydraulics	1

620-101	Fundamentals of DC circuits 1	1
620-102	Fundamentals of DC Circuits 2	1
620-109	Relay Logic	1
620-106	Electric Motors 1	1
Credits		15

### Semester 2

804-114	College Technical Mathematics 1B	2
801-136	English Composition 1	3
444-150	Metal Science	3
420-580	Lathes	1
420-581	Mills	1
620-113	Fundamentals of AC Circuits 1	1
620-114	Fundamentals of AC Circuits 2	1
620-107	Variable Speed Drives 1	1
620-124	Programmable Logic Controllers - PLCs	1
620-134	Sensors	1
Credits		15

### Semester 3

801-197	Technical Reporting	3
809-196	Introduction to Sociology	3
442-142	Introduction to Welding	1
620-166	Conveyor Systems 1	1
620-167	Conveyor Systems 2	1
442-143	Shielded Metal Arc Welding 1	1
620-170	Valves, Gaskets and Seals	1
620-904	Fluid Power 3: Intermediate Pneumatics	1
620-174	Mechanical Power Transmission	1
620-111	Programming Fundamentals 1	1
620-112	Programming Fundamentals 2	1
Credits		15

### Semester 4

809-198	Introduction to Psychology	3
620-171	Human Relations in the Industrial Setting Internship	2
620-172	Machine Setup & Installation 1	1
620-905	Machine Setup & Installation 2	1
620-121	Programmable Automation Controllers (PACs) 1	1
620-122	Programmable Automation Controllers (PACs) 2	1
620-126	Robotics 1	1
620-175	Servomechanisms 1	1
620-906	Fluid Power 4: Intermediate Hydraulics	1
620-907	Fluid Power 5: Advanced Hydraulics	1
620-908	Maintenance Management	1

623-622	Lean Manufacturing	
	Credits	14
	Total Credits	59

## Fire Protection Technician

Associate Degree  
10-503-2

The Fire Protection Technician Program offers the student an exciting career in fire protection, fire prevention and fire engineering. The field of the fire science is concerned with the preservation of life and property from fire and related hazards. The fire protection technician is a highly-skilled specialist with a unique blend of technical knowledge, management abilities, and public education and communication skills. Graduates are ideally suited to careers in public and private fire protection. Another area of employment opportunity exists in the field of sales and service with companies which manufacture and distribute fire protection equipment and related supplies. Expanding industrialization and population growth have created new fire problems which must be solved. In this area, the fire protection technician can be part of the team to design and research the answers to solve these problems which are making many demands upon communities, business, and industry.

The Fire Protection Technician Program is 4 semesters in length and most of the courses are oriented to firefighting, fire protection systems, and fire prevention. As part of the FPT an Emergency Medical Technician-Basic course is required either through a semester long course or split course delivery. Starting with a summer semester in between Semesters 2 and 3 of the FPT Program students may attend an Emergency Medical Technician-Fundamentals course. This 2 credit course is followed by a 3 credit Semester 3 course called EMT-Applications. These two courses equate to the regular, 5 credit, 180 hour, EMT-Basic course and part of the course requirements are to attend 10 hour of clinical time in district emergency rooms. Before FPT students are allowed at clinical sites they must undergo a criminal background check through Certified Background, now known as Castle Branch. This requirement must be completed in full and approved prior to registration; No exceptions will be made. There is an additional fee associated with the background check process and students will be required to fill out the Functional Ability form and Acknowledgement of Risks and Release of Responsibility forms. Any and all revealing of past criminal activity may preclude students from being allowed at clinical sites and successfully completing the FPT Program.

Note: Prior to admission in either the EMT-Basic course or the EMT-Applications course students must also meet the immunization requirements set by the Centers for Disease Control (CDC) and provide proof of health insurance.

## Program Outcomes

- Demonstrate professional conduct by displaying a personal code of ethics, positive work ethics, flexibility teamwork skills, physical fitness, safe procedures, and sensitivity to diverse cultures and individuals.
- Perform fire prevention activities including planning public education, inspection, and investigation.
- Communicate clearly and effectively both verbally and through written documentation with clients, coworkers, other agencies and supervisors.

- Apply incident management skills to emergency incidents.
- Meet professional fire and EMS credentialing standards.

*This series is for all who wish to be certified by the State of Wisconsin. The emphasis is on skilled hands-on training. All classes require a Wisconsin Technical College System (WTCS) test for certification at the completion of each course.*

## Graduates Have Found Employment As

- Fire Fighter
- Fire Protection Technician
- Fire Fighting Equipment Specialist/Sales
- Fire Inspector
- Airport Fire Fighter - Crash, Military, Government, State or Federal

View the entire course listing (p. 85).

Semester 1		Credits
503-142	Fire Fighting Principles	4
503-153	Hazardous Materials Awareness & Operations	1
503-191	Principles of Emergency Services	2
503-195	Fire Behavior and Combustion	3
809-196	Introduction to Sociology	3
801-136	English Composition 1	3
	Credits	16
Semester 2		
503-143	Building Construction for Fire Protection	3
503-159	Fire Fighting Principles II	2
503-192	Principles of Emergency Services Safety & Survival	3
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
	Credits	14
Semester 3		
503-151	Fire Prevention	4
531-110	Emerg Med Tech/EMT-B	5
503-157	Fire Investigation	3
809-198	Introduction to Psychology	3
	Credits	15
Semester 4		
503-154	Hazardous Materials Chemistry	2
503-156	Strategies, Tactics & Inc Mgmt	4
503-194	Fire Protection Hydraulics	3
503-193	Fire Protection Systems	3
801-197	Technical Reporting	3
	Credits	15
	Total Credits	60

## General Education Courses Within Program

Code	Title	Credits
801-197	Technical Reporting	3
801-136	English Composition 1	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3
801-198	Speech	3

## Foundations of Teacher Education

Associate Degree  
10-522-2

As a paraeducator or preserve teacher, graduates of this program will work directly with students under the supervision of a licensed teacher. Your education will prepare you to fulfill multiple roles such as assisting students with assignments, guiding behavior, supporting students with special needs (including personal hygiene), and clerical tasks related to instruction. You may work with children from pre-kindergarten through age 21 during the traditional school day and year. Your career opportunities exist in preschools, elementary schools, middle schools, and high schools.

\*Before receiving a practicum placement, you will need to complete a background check through CastleBranch.

### Program Outcomes

- Support all learning based on knowledge of subject matter
- Identify developmentally appropriate child/adolescent physical, social/emotional, intellectual, and language characteristics and their developmental and environmental impact on learning
- Adapt instruction to meet the diverse needs of all learners
- Utilize a variety of instructional strategies, media, and technology to foster the development of critical thinking and problem solving
- Use proactive classroom management techniques to promote a positive class climate, intrinsic motivation, and optimal learning
- Demonstrate effective written and verbal communication in working collaboratively within the school setting and interactions with students and families
- Assist in planning and implementing instructional strategies that reflect the learning cycle
- Utilize informal assessment strategies to collect data for the support of student learning
- Incorporate the reflective process to promote student learning and professional growth
- Assume professional responsibility for ethical, moral, and legal policies and procedures
- Provide for health and safety needs of students

### Graduates Have Found Employment As

A graduate of this program will have the potential for employment as an educational paraprofessional or paraeducator in schools from the pre-kindergarten through high school level. Paraeducators work with children in preschools, elementary schools, middle schools, and high schools.

Paraeducators may also work in Wisconsin CESA organizations as well as their community partners. Paraeducators can also work with children with special needs.

- Paraeducators
- Paraprofessionals
- Teaching Assistants
- Instructional Assistants
- Educational Assistants
- Autism Behavior Technicians
- Specialized aides in Reading, Math, Computers, or Special Education
- Autism Line Therapists

Semester 1		Credits
522-103	EDU: Introduction to Educational Practices	3
522-106	EDU: Child & Adolescent Development	3
522-107	EDU: Overview of Special Education	3
522-111	EDU: Guiding & Managing Behavior	3
809-198	Introduction to Psychology	3
Credits		15
Semester 2		
522-104	EDU: Technology and Media Resources	3
522-118	EDU: Techniques for Math	3
522-101	EDU: Teamwork in School Setting	3
809-196	Introduction to Sociology	3
801-198	Speech	3
Credits		15
Semester 3		
522-129	EDU: Practicum 1	3
522-120	EDU: Techniques for Science	3
522-124	EDU: Supporting Students with Disabilities	3
522-102	EDU: Techniques for Reading & Language Arts	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
Credits		15
Semester 4		
522-122	EDU: Advanced Reading and Language Arts	3
522-131	EDU: Practicum 2	3
522-132	EDU: Positive Classroom Management Techniques	3
522-139	EDU: Support Students with Medical/Mental Health Needs	3



801-136	English Composition 1	3
	Credits	15
	Total Credits	60

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
809-159	Abnormal Psychology	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-198	Introduction to Psychology	3
809-196	Introduction to Sociology	3

## Funeral Service

### Program Overview

#### Associate of Applied Science

Designed as a shared program with the Milwaukee Area Technical College (<https://www.matc.edu/course-catalog/community-human-services/funeral-service.html>), the Funeral Service program prepares individuals for a career as a licensed funeral director and embalmer. Students who complete the program will earn an associate degree and be eligible to receive their license (pending successful completion of the National Board Exam and State Board Exam).

The funeral service education is comprised of two categories: arts and sciences. The arts category covers the following topics: psychology, marketing and merchandising, funeral management, funeral arrangements, funeral service practices and law, grief, ethics, business management, and more. The science category covers the following topics: embalming, restorative art, funeral chemistry, pathology, microbiology, and more.

### Program Outcomes

- Prepare the deceased human body for identification, viewing, including case analysis, embalming, cosmetizing, and restorations
- Comply with OSHA Bloodborne Pathogen Standards
- Document and coordinate people and funeral-related activities
- Anticipate and meet the needs of mourners in a tactful, discreet, and compassionate manner
- Apply counseling skills to the arrangement of funerals
- Recognize the burial rituals of various religious faiths, military branches, public service, and fraternal organizations

### Academic Plan

The academic plan for the Funeral Service program can be found on the program page on the MATC website (<https://www.matc.edu/course-catalog/community-human-services/funeral-service.html>).

## Human Resources

#### Associate Degree 10-116-1

The Human Resources Program prepares students to assist small to mid-sized organizations in effectively recruiting, developing, and utilizing their human resources. Students learn how to maximize the human potential for the benefit of the organization. This field of employment requires knowledge and skills in the following areas: occupational job analysis, compensation, benefits, training, staffing, employee relations, safety, and human resources information systems. Careers such as HR Generalists or HR Specialists can be found in any non-profit, service or manufacturing organization. Human Resource Specialists can focus on areas such as employee recruitment/interviewing, employee training and development, wages and compensation, benefits, employee wellness, and occupational analysis. Students will have an opportunity to prepare for various related certifications such as from the Society of Human Resources (SHRM) and OSHA.

### Program Outcomes

- Recruit and interview qualified candidates for available positions.
- Coordinate and conduct new employee orientations.
- Maintain personnel records and human resources information systems.
- Administer payroll and benefit programs.
- Organize health and safety programs.
- Coordinate employee training and education.
- Plan and implement employee relations activities.
- Understand employment law in order to assist managers and supervisors.
- Provide leadership with employee relations and EEO initiatives.
- Assist HR managers in larger organizations.

### Graduates Have Found Employment As

- HR Manager/Coordinator/Administrator
- Training and Development Manager
- Compensation and Benefits Coordinator
- Employment and Placement Specialist
- Recruitment Specialist
- Labor Relations Specialist

View the entire course listing (p. 85).

Semester 1		Credits
102-148	Introduction to Business and Management	3
196-168	Organizational Development	3
103-138	Word Documents	2
196-193	Human Resource Management	3
801-136	English Composition 1	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3-4
Credits		17-18

Semester 2		Credits
102-109	Business Careers Planning and Communication	3
116-102	Training and Development	3

196-103	Employment Law	3
116-116	Staffing Organizations	3
103-107	Intermediate Excel	2
Credits		14

**Semester 3**

101-111	Accounting I	4
116-115	Compensation and Benefits	3
196-108	Health, Safety and Security	3
809-198	Introduction to Psychology	3
116-119	Labor Relations	3
Credits		16

**Semester 4**

101-135	Payroll Accounting	2
102-115	Management Principles	3
116-138	Human Resource Practicum	3
809-196 or 809-122	Introduction to Sociology or Intro to American Government	3
801-198	Speech	3
Credits		14
Total Credits		61-62

**General Education Courses Within Program**

Code	Title	Credits
801-136	English Composition 1	3
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3

**Human Services Associate**

*Associate Degree*  
*10-520-3*

The Human Services associate program at Blackhawk Technical College trains students to provide information, support, care and advocacy in a human service agency. Students will acquire the skills needed to work with individuals, groups and communities and will learn to work with people of diverse racial, ethnic and cultural backgrounds. General education courses included in the program develop in students a to better understanding of social problems. During the second year of the program, students will have the opportunity to participate in a Field Experience in a human service agency.

**Program Outcomes**

1. Model a commitment to cultural competence
2. Uphold the Ethical Standards and Values for Human Service Professionals.
3. Demonstrate professionalism
4. Utilize community resources
5. Apply human services interventions and best practices
6. Cultivate professional relationships

Associate degree graduates are ready for a range of professional positions in the field of human services including:

- Case Manager
- Community Support Worker
- Substance Abuse Counselor in Training
- Income Maintenance Worker
- Information and Referral Specialist
- Intake Worker
- Outreach Worker
- Prevention Worker
- Resident Manager
- Volunteer Coordinator

With additional education and/or work experience, graduates may find employment as:

- Substance Abuse Counselor
- Program Director
- Social Worker

<b>Semester 1</b>		<b>Credits</b>
520-100	Introduction to Human Services	3
520-101	Community Resources and Services	3
520-102	Introduction to Gerontology	3
801-198	Speech	3
809-198	Introduction to Psychology	3
Credits		15
<b>Semester 2</b>		
520-103	Interviewing Principles & Documentation	3
520-104	Racial and Cultural Diversity in Human Services	3
520-105	Intro to Addiction and Substance Abuse Disorders	3
520-106	Professional Practices in Human Services	3
809-196	Introduction to Sociology	3
Credits		15
<b>Semester 3</b>		
520-107	Field Experience / Human Services 1	3
520-108	Children and Family Services	3
520-109	Group Facilitation	3
520-110	People with Disabilities	3
801-136	English Composition 1	3
Credits		15
<b>Semester 4</b>		
520-111	Field Experience / Human Services 2	3
520-112	Human Services Organizational Operations	3
520-113	Rehabilitation Services	3

520-114	Victimology	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
Credits		15
Total Credits		60

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
809-198	Introduction to Psychology	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-196	Introduction to Sociology	3

## Individualized Tech Studies

Associate Degree  
10-825-1

Rapid changes in technology and work processes have created a growing demand for flexibility and enhanced skill levels in the workplace. Employers increasingly are seeking workers able to perform multiple tasks and roles that cut across traditional occupational categories. To be productive and effective in the changing workplace, workers may need skills and knowledge drawn from a variety of traditional areas of study. As a result, BTC has a versatile Individualized Technical Studies Degree which complements industry needs, enabling students interested in pursuing an Associate Degree to create a unique, individualized program. This specialized program of study combines the skills taught in two or more existing BTC programs, and is designed in cooperation with an occupational advisor from the target industry and an academic advisor from BTC. Students achieve their career goals by acquiring skills and knowledge in an Associate Degree program tailored to meet their specific employment needs.

Below are the general requirements for your Individualized Technical Studies degree. Working with your academic advisor, you can plan your Individualized Technical Studies degree program.

### General Education Courses (21-30 credits required) Communications (select at least two courses) - 6 credits total required

Code	Title	Credits
801-136	English Composition 1	3
801-195 or 801-196	Written Communication Oral/Interpersonal Communication	3
801-197	Technical Reporting	3
801-198	Speech	3

### Social Science (select at least one course) - 3 credits total required

Code	Title	Credits
809-166	Introduction to Ethics: Theory and Application	3
809-172	Introduction to Diversity Studies	3
809-195	Economics	3
809-196	Introduction to Sociology	3

### Behavioral Science (select at least one course) - 3 credits total required

Code	Title	Credits
809-198	Introduction to Psychology	3
809-159	Abnormal Psychology	3
809-188	Developmental Psychology	3
809-172	Introduction to Diversity Studies	3
809-196	Introduction to Sociology	3
809-166	Introduction to Ethics: Theory and Application	3

### Mathematics or Science (select at least one course) - 3 credits total required

Select and appropriate mathematics or science course in consultation with your academic advisor.

Code	Title	Credits
804-107	College Mathematics	3
804-133	Math and Logic	3
804-123	Math with Business Applications	3

**Also select 6 additional credits of approved General Education courses to complete the General Education Course Requirements.**

### Individualized Technical Studies Courses (36-47 credits required)

Working with your academic advisor, select existing courses from the program areas in which you are interested. At least **20 credits** must be focused in one of your desired areas.

### Electives (0-6 credits required)

Select up to an additional 6 credits of electives that are relevant to your career goals.

### Total Program Credits - 60-70

## IT-Network Specialist

Associate Degree  
10-150-2

The Network Specialist Associate of Applied Science Degree prepares students for a career in computer network support and integrated technology in order to meet business demands for information-sharing. Students receive training in network design, installation, troubleshooting, administration, security and management. After completing this program, the student will have covered basic topic areas needed for the MCSA, NET+, A+, Security+ and CCNA certifications.

## Program Outcomes

- Implement computer networks
- Implement client systems
- Implement server operating systems
- Implement network security components
- Develop technical documentation
- Troubleshoot network systems
- Apply system analysis and design concepts
- Manage an Information Technology project from inception to implementation

## Graduates Have Found Employment As

- Network Administrator
- Help Desk Specialist
- Network Support Specialist
- Technical Support Specialist
- Network Technician
- User Support Specialist
- Technical Consultant

View the entire course listing (p. 85).

Semester 1		Credits
631-124	Microcomputer Fundamentals: PC Components	1
631-125	Microcomputer Fundamentals 2: PC Assembly	1
631-126	Microcomputer Fundamentals 3: Intro to Web Programming	1
631-127	PC Software Fundamentals 1: Operating Systems	1
631-128	PC Software Fundamentals 2: Software Applications	1
631-129	PC Software Fundamentals 3: Troubleshooting Operating Systems	1
631-130	PC Peripherals and Troubleshooting 1: Peripherals	1
631-131	PC Peripherals and Troubleshooting 2: Printers & Laptops	1
631-132	PC Peripherals and Troubleshooting 3: Troubleshooting Hardware	1
631-133	IT Customer Service Fundamentals 1	1
631-134	IT Customer Service Fundamentals 2	1
631-135	IT Customer Service Fundamentals 3	1
631-111	PC Hardware Assessment	1
801-136	English Composition 1	3
Credits		16
Semester 2		
631-136	Network Fundamentals 1	1
631-137	Network Fundamentals 2	1
631-138	Network Fundamentals 3	1
631-139	Troubleshooting Network Resources 1	1
631-140	Troubleshooting Network Resources 2	1
631-141	Troubleshooting Network Resources 3	1
150-157	IT Project Management 1	1
150-158	IT Project Management 2	1
150-159	IT Project Management 3	1
804-134	Mathematical Reasoning	3

801-198	Speech	3
Credits		15
Semester 3		
150-169	Introduction to Enterprise Virtualization 1	1
150-170	Introduction to Enterprise Virtualization 2	1
150-171	Introduction to Enterprise Virtualization 3	1
150-183	Windows Enterprise Server Administration 1	1
150-184	Windows Enterprise Server Administration 2	1
150-185	Windows Enterprise Server Administration 3	1
150-186	LAN Switching & Wireless 1	1
150-187	LAN Switching & Wireless 2	1
150-188	LAN Switching & Wireless 3	1
150-189	System Analysis & Design 1	1
150-190	System Analysis & Design 2	1
150-191	System Analysis & Design 3	1
809-198	Introduction to Psychology	3
Credits		15
Semester 4		
631-160	Malicious Software Fundamentals 1	1
631-161	Malicious Software Fundamentals 2	1
631-162	Malicious Software Fundamentals 3	1
150-192	Server & Data Center Virtualization 1	1
150-193	Server & Data Center Virtualization 2	1
150-194	Server & Data Center Virtualization 3	1
150-195	Advanced LAN/WAN Topics 1	1
150-196	Advanced LAN/WAN Topics 2	1
150-197	Advanced LAN/WAN Topics 3	1
150-182	Information Technology Career Preparation	1
631-122	Service Support Internship	1
809-196	Introduction to Sociology	3
Credits		14
Total Credits		60

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
804-134	Mathematical Reasoning	3
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3

# Web Software Developer

Associate Degree  
10-152-4

The IT-Web Software Developer Associate of Applied Science Degree meets the specific skills and knowledge requirements of technical and professional jobs within the information technology field for Web Development specialists including analyst/programmer, e-Commerce, or Web design/support. It is designed to meet entry-level education needs of most segments of the IT field which utilize a variety of computers. Training blends general educational development and required IT technical skills. Graduates are prepared for entry-level Web developer jobs in government, insurance, manufacturing, service, software development, wholesale and retail sales, utilities, banking and accounting.

## Program Outcomes

- Design software systems
- Integrate database technologies
- Develop software applications
- Develop technical documentation
- Demonstrate work ethics and reliable behavior including, but not limited to, assuming responsibility for decisions and actions, utilizing time and stress managements skills, and displaying initiative
- Work as a team member by demonstrating good communication and listening skills, cooperation, and providing a supportive environment
- Demonstrate an understanding of the IT field and its job roles

View the entire course listing (p. 85).

Semester 1		Credits
631-124	Microcomputer Fundamentals: PC Components	1
631-125	Microcomputer Fundamentals 2: PC Assembly	1
631-126	Microcomputer Fundamentals 3: Intro to Web Programming	1
631-127	PC Software Fundamentals 1: Operating Systems	1
631-128	PC Software Fundamentals 2: Software Applications	1
631-129	PC Software Fundamentals 3: Troubleshooting Operating Systems	1
631-130	PC Peripherals and Troubleshooting 1: Peripherals	1
631-131	PC Peripherals and Troubleshooting 2: Printers & Laptops	1
631-132	PC Peripherals and Troubleshooting 3: Troubleshooting Hardware	1
631-133	IT Customer Service Fundamentals 1	1
631-134	IT Customer Service Fundamentals 2	1
631-135	IT Customer Service Fundamentals 3	1

631-111	PC Hardware Assessment	1
801-136	English Composition 1	3
	Credits	16

## Semester 2

152-195	Markup Basics 1	1
152-196	Markup Basics 2	1
152-197	Design Basics 1	1
152-198	Design Basics 2	1
152-199	Fundamentals of High-Level Scripting	1
152-202	Intermediate High-Level Scripting	1
152-205	Advanced High-Level Scripting	1
152-206	Relational Database Design	1
152-207	Relational Database Development	1
152-208	Relational Database Coding	1
152-209	Web Server Basics	1
152-210	Web Server Administration	1
804-134	Mathematical Reasoning	3
	Credits	15

## Semester 3

152-211	Project & Framework Management 1	1
152-212	Project & Framework Management 2	1
152-213	Version Control 1	1
152-214	Version Control 2	1
152-215	Content Management Systems 1	1
152-216	Content management systems 2	1
152-218	Search Engine Optimization 1	1
152-222	Front End Framework	1
152-223	Mobile Application Development	1
152-224	Emerging Technologies Research	1
809-198	Introduction to Psychology	3
801-198	Speech	3
	Credits	16

## Semester 4

152-225	Programming 1	1
152-226	Programming with Databases	1
152-227	Advanced Programming 1	1
152-228	Social Media 1	1
152-229	Social Media 2	1
152-230	Social Media 3	1
152-231	Responsive Design 1	1
152-232	Responsive Design 2	1
152-233	Responsive Design for Accessibility	1
152-235	Emerging Technologies Capstone	3
809-196	Introduction to Sociology	3



152-234	Resume and Portfolio Development for Web Developers	1
	Credits	16
	Total Credits	63

## General Education Courses Within Program

Code	Title	Credits
801-195	Written Communication	3
809-196	Introduction to Sociology	3
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-198	Introduction to Psychology	3

## Laboratory Food Science Technician

Associate Degree  
10-506-6

This associate degree option will build upon the lab skills in the one year technical diploma, by adding additional computer skills, additional hands on lab training in microbiology and food product testing, and a study of the regulations and regulatory agencies governing food production.

Graduates of the program will be prepared to work in a variety of industries related to food production and safety of the food supply. This includes but is not limited to breweries, cheese plants, sterile packaging facilities, food product testing labs, food safety testing labs.

- Lab Technician
- QC Scientist 1
- Food/Beverage Manufacturing Lab Tech
- Food Safety & Quality Auditor (Technician)
- Process Control Technician
- QC Lab Tech
- Quality Assurance Tech
- Food/Beverage Safety Coordinator
- Food/Beverage Safety Specialist
- Food Laboratory Technician
- Food Lab Associate
- Food Safety Technician

Semester 1		Credits
103-112	Introduction to Microsoft Excel	1
513-110	Basic Laboratory Skills	1
506-108	Laboratory Safety and Hazardous Materials	1
102-148	Introduction to Business and Management	3
806-199	General, Organic and Biological Chemistry	4
801-136	English Composition 1	3

804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
	Credits	16

### Semester 2

506-102	Intermediate Laboratory Skills	3
506-105	Quality Concepts in Laboratories	3
506-109	Data Management for Laboratory Assistants	1
804-189	Introductory Statistics	3
806-197	Microbiology	4
801-198	Speech	3
	Credits	17

### Semester 3

506-111	Food Microbiology	4
506-114	Introduction to the USDA and FDA	2
506-113	Excel and Access for the Laboratory	3
513-170	Introduction to Molecular Diagnostics	2
809-196	Introduction to Sociology	3
506-120	ServSafe Certification Preparation	1
	Credits	15

### Semester 4

506-115	Food Production Regulations / HACCP, GFSI, FSMA	2
102-131	Introduction to Business Sustainability	1
102-132	Lean Operations	1
102-133	Lean Tools	1
506-117	Food Laboratory Occupational Experience	2
809-198	Introduction to Psychology	3
806-172 or 506-112	Basic Nutritional Science or Food and Nutritional Science	3
	Credits	13
	Total Credits	61

## General Education Courses Within Program

Code	Title	Credits
804-189	Introductory Statistics	3
801-136	English Composition 1	3
806-197	Microbiology	4
806-199	General, Organic and Biological Chemistry	4
809-198	Introduction to Psychology	3
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-196	Introduction to Sociology	3
806-172	Basic Nutritional Science	3

## Leadership Development

### Associate Degree 10-196-1

The Leadership development degree is built on a business meta major and is part of three different programs at the college and should provide laddering into or attachment to any of these three programs

## Program Outcomes

1. Utilize quality strategies and tactics
2. Apply effective leadership skills
3. Apply Human Resource policies and procedures
4. Perform supervisory management functions to achieve organizational objectives

## Graduates Have Found Employment As

1. First line supervisors
2. Team Leaders
3. Shift Leaders
4. Quality Leaders
5. Lean Process Leaders

Semester 1		Credits
102-148	Introduction to Business and Management	3
196-100	Supervision 1	1
196-154	Leadership 1	1
196-168	Organizational Development	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
801-136	English Composition 1	3
103-138	Word Documents	2
Credits		16
Semester 2		Credits
196-140	Supervision 2	1
196-155	Leadership 2	1
196-157	Essentials of Quality 1	1
196-161	Teambuilding and Communication 1	1
116-116	Staffing Organizations	3
102-132	Lean Operations	1
801-198	Speech	3
196-193	Human Resource Management	3
Credits		14
Semester 3		Credits
196-153	Supervision 3	1
196-158	Essentials of Quality 2	1
196-162	Teambuilding and Communication 2	1
101-111	Accounting I	4
103-107	Intermediate Excel	2
809-198	Introduction to Psychology	3

196-108	Health, Safety and Security	3
Credits		15
Semester 4		
102-155	Introduction to Project Management	3
102-134	Lean Six Sigma	3
196-156	Leadership 3	1
196-159	Essentials of Quality 3	1
196-163	Teambuilding and Communication 3	1
196-164	Leadership Practicum	1
809-196 or 809-122	Introduction to Sociology or Intro to American Government	3
116-102	Training and Development	3
Credits		16
Total Credits		61

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
804-134	Mathematical Reasoning	3
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3

## Medical Administrative Coder

### Associate Degree 10-160-5

The Medical Administrative Coder program will provide you training to prepare you for a position in the medical coding and insurance billing field. Medical Administrative Coder students receive specialized training in medical coding, medical ethics, records management, medical terminology, human anatomy, health insurance, medical billing, medical transcription, digital literacy for health care and Microsoft Office Suites software (Word, Excel, and PowerPoint).

## Program Outcomes

- Demonstrate the medical and legal aspects of healthcare office practices including confidentiality of health records, release of information, patients' rights, use of health records as legal evidence, informed consent, malpractice, as well as agency, physician, and employee liability.
- Use medical terminology and knowledge of the human body systems in performing essential functions in business health care setting.
- Produce quality medical documents.
- Demonstrate the following professional traits while working in a healthcare office environment: dependability, punctuality, responsibility, acceptable appearance, sound judgment, ethical behavior, flexibility, and adaptability.
- Apply medical coding principles and guidelines for coding, billing, and reimbursement in outpatient settings at entry level proficiency.
- Use computers as a tool for solving problems, collecting data, managing and communicating information, and making decisions.

- Use reference materials to research information.
- Apply analytical skills in solving problems, collecting data, managing and communication information, presenting ideas, and making decisions.

## Graduates Have Found Employment As

- Medical Secretary
- Administrative Secretary
- Medical Coders
- Medical Transcriptionist
- Medical Records Technician/Medical Records Clerk
- Medical Voucher Clerk/Underwriting Clerk
- Receptionist
- Medical Insurance Biller
- Medical Claims Processor
- Medical Clerk/Typist
- Clinic Clerk/Hospital Clerk/Admissions Clerk

Semester 1		Credits
501-107	Digital Literacy for Health Care	2
801-136	English Composition 1	3
501-101	Medical Terminology	3
509-102	Human Body in Health & Disease	3
509-109	Medical Law, Ethics and Professionalism	2
509-101	Medical Assistant Admin Procedures	2
Credits		15
Semester 2		
509-107	Med Office Insurance and Finance	2
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
509-111	Pharmacology for Allied Health	2
106-142	Customer Service Essentials	1
102-148	Introduction to Business and Management	3
809-196 or 809-122	Introduction to Sociology or Intro to American Government	3
Credits		14
Semester 3		
160-105	Medical Editing and the Electronic Medical Record	3
160-114	Healthcare Records Management	3
530-150	Medical Office Coding I	4
160-136	Patient Billing and Reimbursement	4
801-198	Speech	3
Credits		17
Semester 4		
809-198	Introduction to Psychology	3
106-127	Administrative Office Communications	3

160-103	Medical Transcription	4
160-124	Supervised Occupational Experience-Medical Office	1
530-103	Medical Office Coding II	3
Credits		14
Total Credits		60

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
809-198	Introduction to Psychology	3
809-196 or 809-122	Introduction to Sociology Intro to American Government	3
806-177	General Anatomy and Physiology	4

## Medical Administrative Specialist

### Associate Degree

#### 10-106-4

The Medical Administrative Specialist Associate Degree program provides educational opportunities for those interested in working in a variety of health care office settings including medical office, clinic, hospitals, public health departments, insurance companies, and medical product manufacturers. Medical Administrative Specialist students receive specialized training in medical ethics, records management, office procedures, medical terminology, human anatomy, health insurance, medical billing, medical transcription, coding, and MS Office Suite software.

#### Program Outcomes

- Demonstrate the medical legal aspects of health care office practices including confidentiality of health records, release of information, patient's rights, health records as legal evidence, informed consent, malpractice, agency, physician and employee liability.
- Produce quality medical documents.
- Use medical terminology and knowledge of the human body systems in performing essential functions in business health care setting.
- Perform financial practices through analysis of payer data and reimbursement methods.
- Demonstrate professionalism in a healthcare setting.
- Perform routine healthcare administrative procedures

Semester 1		Credits
501-101	Medical Terminology	3
501-107	Digital Literacy for Health Care	2
509-101	Medical Assistant Admin Procedures	2
509-102	Human Body in Health & Disease	3

804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
801-136	English Composition 1	3
Credits		16
<b>Semester 2</b>		
509-111	Pharmacology for Allied Health	2
509-107	Med Office Insurance and Finance	2
509-109	Medical Law, Ethics and Professionalism	2
102-148	Introduction to Business and Management	3
103-138	Word Documents	2
103-107	Intermediate Excel	2
809-196	Introduction to Sociology	3
Credits		16
<b>Semester 3</b>		
101-111	Accounting I	4
106-144	Meeting and Event Planning	2
106-127	Administrative Office Communications	3
160-105	Medical Editing and the Electronic Medical Record	3
160-114	Healthcare Records Management	3
Credits		15
<b>Semester 4</b>		
106-103	Medical Transcription	4
160-124	Supervised Occupational Experience-Medical Office	1
809-198	Introduction to Psychology	3
801-198	Speech	3
106-142	Customer Service Essentials	1
102-155	Introduction to Project Management	3
Credits		15
Total Credits		62

## General Education Courses Within Program

Code	Title	Credits
801-195	Written Communication	3
801-196	Oral/Interpersonal Communication	3
804-123	Math with Business Applications	3
806-194	Survey of Anatomy and Physiology	3
809-166	Introduction to Ethics: Theory and Application	3
809-172	Introduction to Diversity Studies	3
809-195	Economics	3
809-199	Psychology of Human Relations	3

## Medical Laboratory Technician

Associate Degree  
10-513-1

Prepare for a career as medical laboratory technician in hospitals, clinics and doctors' offices. In the laboratory, the MLT performs analytical procedures under the supervision of a medical technologist or physician. Career potential also exists in epidemiology, forensic medicine and biomedical manufacturing.

The Blackhawk Technical College Medical Laboratory Technician Associate Degree Program is accredited through the National Accrediting Agency for Clinical Laboratory Science (NAACLS), 5600 N. River Rd, Suite 720, Rosemont, IL 60018. Phone: 773-714-8880, email: info@naacsls.org.

A combination of fundamental laboratory techniques and clinical experience prepares graduates for work in laboratories serving the health care sector. The final semester of the program is a clinical experience in laboratories in community healthcare facilities. Students must petition to enter the clinical MLT classes, and should anticipate the possibility of traveling to complete the clinical experience.

Graduates of the program qualify for the American Society of Clinical Pathologists Board of Registry certification exam for medical laboratory technicians under the direction of the American Society of Clinical Pathologists.

*Suggested courses for program preparation:*

- One year of high school chemistry, biology and algebra or college equivalent (see specific requirements listed below).
- Medical terminology or 2 years of occupational experience in the medical field

*Program Requirements:*

**To be admitted to the Medical Lab Technology (MLT) program, the student is required to have mandatory attendance at a Blackhawk Technical College MLT program orientation. This orientation occurs in the Summer Quality Assurance Laboratory Math Course, or is scheduled individually if necessary. High School Chemistry or College Chemistry Prep and High School Algebra or General College Math Review. are required for entrance into the BTC MLT Program**

- Once admitted to the program, the following requirements must be met in order to participate in the clinical experience.
- Caregiver background check
- Physical exam and completed personal history form on file prior to the beginning the fourth semester clinical rotation.
- Successful completion of all program courses with a C or better.

This program is offered at the Monroe Campus.

## Program Outcomes

- Apply modern clinical methodologies including problem solving and troubleshooting according to predetermined criteria.
- Collect and process biological and other specimens.
- Perform and report results of clinical laboratory tests.
- Apply laboratory results to diagnosis of clinical conditions and/or diseases.
- Communicate with colleagues and patients in a professional manner.
- Participate in training peers on technical skills.

- Monitor and evaluate quality control in the laboratory.
- Practice laboratory safety and regulatory compliance.
- Perform information processing in the clinical laboratory.
- Model professional behaviors, ethics, and appearance.

#### Program Completion Three Year Statistics:

Program's Graduate Certification Pass Rates: 81%

Program's Graduation and Attrition Rates: 100%

Program's Graduate Placement Rates: 92%

View the entire course listing (p. 85).

Courses taken before semester 1		Credits
513-113	Quality Assurance Laboratory Math	1
Credits		1
<b>Semester 1</b>		
513-110	Basic Laboratory Skills	1
513-111	Phlebotomy	2
513-115	Basic Immunology Concepts	2
806-177	General Anatomy and Physiology	4
806-199	General, Organic and Biological Chemistry	4
801-136	English Composition 1	3
Credits		16
<b>Semester 2</b>		
506-102	Intermediate Laboratory Skills	3
513-109	Blood Bank	4
513-120	Basic Hematology	3
513-121	Coagulation	1
806-197	Microbiology	4
801-198	Speech	3
Credits		18
<b>Summer between year 1 and year 2</b>		
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3
Credits		6
<b>Semester 3</b>		
513-114	Urinalysis	2
513-130	Advanced Hematology	2
513-133	Clinical Microbiology	4
513-170	Introduction to Molecular Diagnostics	2
513-134	Clinical Chemistry	4
Credits		14
<b>Semester 4</b>		
506-105	Quality Concepts in Laboratories	3
513-140	Advanced Microbiology	2
513-151	Clinical Experience 1	3
513-152	Clinical Experience 2	4

513-153	Clinical Portfolio	1
Credits		13
Total Credits		68

## General Education Courses Within Program

Code	Title	Credits
801-195	Written Communication	3
801-198	Speech	3
806-177	General Anatomy and Physiology	4
806-197	Microbiology	4
806-199	General, Organic and Biological Chemistry	4
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3

## Nuclear Technology

### Associate Degree

10-624-1

Increasing the use of radiation and radioactive materials in today's world has created a demand for nuclear technicians especially in Janesville and Beloit, Wisconsin where the Department of Energy Nuclear Security Administration has approved Shine Medical Technologies and NorthStar Medical Radioisotopes, Inc. to build production plants in the next 2-3 years.

The Nuclear Technology Associate's Degree program offers students a unique opportunity to obtain specialized training to work with radioactive materials. In addition to being a high demand field, it also pays extremely well. In fact, according to the Department of Labor website, the median starting salary for this field in 2015 was \$38.59 per hour! It's also an excellent springboard for a four-year degree in health physics and radiation safety.

### SHARED PROGRAM

Designed as a shared program with Lakeshore Technical College (LTC) (<https://gotoltc.edu/academics/programs-of-study/nuclear-technology-program/>), classes may be offered in traditional classroom settings, online or using Interactive Television (ITV) to link instruction from both Blackhawk and LTC. In some cases, students may be asked to attend classes outside of their current district. Check with a program adviser for more details or v (<https://gotoltc.edu/Assets/gotoltc.edu/pdf/academics/2018-2019-program-sheets/2018-2019-Nuclear-Technology.pdf>) visit the program site on the LTC website (<https://gotoltc.edu/academics/programs-of-study/nuclear-technology-program/>).

### SPECIAL NOTES

- Students can earn a Nuclear Uniform Curriculum Program (NUCP) certification by maintaining a "B" or above in all coursework (NUCP certification is contingent upon LTC's NUCP partnership with a nuclear facility)...online students are not eligible.
- Gaining employment in the nuclear, radiation safety, and health physics likely includes a very comprehensive criminal background check, credit history, civil actions and a psychological profile.

- Online Option: Available to working adults in Nuclear/Radiation Safety/Health Physics industry. Online classes are constructed without hands-on lab components, therefore, online students should work with their industry supervisor to identify suitable activities at the worksite.

## Program Outcomes

- Work safely within industrial and radiological hazard areas.
- Diagnose equipment requiring electrical or mechanical repair and carry out preventive maintenance procedures.
- Understand and communicate nuclear technology-related concepts effectively in both oral and written formats.
- Perform radiological surveys for radiation and radioactive contamination.
- Follow procedures for operating and maintaining systems and equipment at nuclear facilities.
- Participate in applying nuclear technologies to a variety of industrial, medical, and research processes.
- Apply knowledge in a variety of related occupational jobs such as reactor plant operations, maintenance, quality assurance, etc.

## Potential Employment Opportunities

- Nuclear Monitoring Technician
- Occupational Health and Safety Technician
- Chemical Technician
- Nuclear Engineer
- Power Plant Operator, Dispatcher or Distributor

## Nursing

*Associate Degree*  
10-543-1

The Associate Degree Nursing program prepares nurses to function with the knowledge, skill and judgment of beginning staff nurses in a variety of health care settings. The Associate Degree Program is accredited by the:

Accreditation Commission for Education in Nursing, Inc. (ACEN). For more information about this accreditation contact:

ACEN  
3343 Peachtree Road NE, Suite 850  
Atlanta, Georgia 30326  
Phone (404) 975-5000  
Fax (404) 975-5020  
<http://www.acenursing.org>

Graduates are eligible to apply to the Wisconsin Board of Nursing to take the examination for licensure as a Registered Nurse. State Administrative Code rules state that a graduate may have difficulty obtaining a license with an arrest or conviction record that is substantially related to nursing practice. The Coordinator of the program is available to discuss concerns in this area.

Students may apply for testing for licensure as L.P.N. (Licensed Practical Nurse) after successfully completing all courses through the second semester. L.P.N.'s entering into the ADN program may receive credit for past clinical education based on their current knowledge, skills and judgment. In order to help L.P.N.'s be program ready, they will need

to take the Nursing Bridge course before entering third semester. Re-entry, transfer, and LPN students must contact the counseling office for information about entry to the nursing program. Acceptance to the program will be based upon space availability and approval of the nursing faculty.

## Program Outcomes

- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving professional identity as a nurse committed to evidence-based practice, caring, advocacy and quality care.
- Demonstrate appropriate written, verbal, and nonverbal communication in a variety of clinical contexts.
- Integrate social, mathematical, and physical sciences, pharmacology, and pathophysiology in clinical decision making.
- Provide patient centered care by utilizing the nursing process across diverse populations and health care settings.
- Minimize risk of harm to patients, members of the health care team and self through safe individual performance and participation in system effectiveness.
- Lead the multidisciplinary health care team to provide effective patient care throughout the lifespan.
- Use information and technology to communicate, manage data, mitigate error, and support decision-making.

Graduates may work as a Registered Nurse or Licensed Practical Nurse in a variety of settings including acute care, long term care, or some community settings.

View the entire course listing (p. 85).

Semester 1		Credits
543-101	Nursing Fundamentals	2
543-102	Nursing Skills	3
543-103	Nursing Pharmacology	2
543-104	Nsg: Intro Clinical Practice	2
806-177	General Anatomy and Physiology	4
801-136	English Composition 1	3
Credits		16
Semester 2		
543-105	Nursing Health Alterations	3
543-106	Nursing Health Promotion	3
543-107	Nsg: Clin Care Across Lifespan	2
543-108	Nsg: Intro Clinical Care Mgt	2
806-179	Advanced Anatomy and Physiology	4
801-198	Speech	3
Credits		17
Semester 3		
543-109	Nsg: Complex Health Alterat 1	3
543-110	Nsg: Mental Health Comm Con	2
543-111	Nsg: Intermed Clin Practice	3
543-112	Nursing Advanced Skills	1
806-197	Microbiology	4



809-198	Introduction to Psychology	3
	Credits	16
<b>Semester 4</b>		
543-113	Nsg: Complex Health Alterat 2	3
543-114	Nsg: Mgt & Profess Concepts	2
543-115	Nsg: Adv Clinical Practice	3
543-116	Nursing Clinical Transition	2
809-196	Introduction to Sociology	3
809-188	Developmental Psychology	3
	Credits	16
	Total Credits	65

## General Education Courses Within Program

Code	Title	Credits
801-136	English Composition 1	3
801-198	Speech	3
806-177	General Anatomy and Physiology	4
806-179	Advanced Anatomy and Physiology	4
806-197	Microbiology	4
809-188	Developmental Psychology	3
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3

## Physical Therapist Assistant

Associate Degree  
10-524-1

The physical therapist assistant (PTA) is a technically educated health provider who assists the physical therapist (PT) in the provision of physical therapy and may perform physical therapy interventions selected by the supervising PT. The PTA works under the direction and supervision of the PT, helping manage conditions such as back and neck injuries related to work and sports, and others. PTA's work in a broad range of settings. Employment opportunities for PTA's are located in hospitals, outpatient clinics, rehabilitation facilities, skilled nursing, sub acute, and long-term care facilities, home health agencies, schools, hospice, industrial health clinics, community health centers, fitness centers and sports training facilities, and colleges and universities.

### Program Outcomes

- Demonstrate clear and collaborative communication with patients, families, and the health care team
- Exhibit behaviors and conduct that reflect respect and sensitivity according to physical therapy practice standards
- Function under the supervision of a physical therapist in a safe, legal ethical manner to ensure the safety of patients, self, and others throughout the clinical interaction
- Produce documentation to support the delivery of physical therapy services
- Demonstrate critical thinking skills to implement and modify treatment within a plan of care under the direction and supervision of a physical therapist.

- Perform data collection essential for carrying out the plan of care under the direction and supervision of a physical therapist
- Perform technically competent evidence-based interventions under the direction and supervision of a physical therapist
- Educate patients, families and other health care providers
- Integrate components of operational and fiscal practices of physical therapy service in a variety of settings
- Implement a self-directed plan for career development, credentials and lifelong learning

View the entire course listing (p. 85).

Courses taken before semester 1		Credits
801-136	English Composition 1	3
801-198	Speech	3
806-177	General Anatomy and Physiology	4
804-134	Mathematical Reasoning	3
806-139	Survey Of Physics	3
	Credits	16
<b>Semester 1</b>		
524-139	PTA Patient Interventions	4
524-156	PTA Applied Kinesiology 1	4
524-157	PTA Applied Kinesiology 2	3
809-166	Introduction to Ethics: Theory and Application	3
	Credits	14
<b>Semester 2</b>		
524-142	PTA Therapeutic Exercise	3
524-143	PTA Therapeutic Modalities	4
524-145	PTA Principles of Musculoskeletal Rehabilitation	4
524-147	PTA Clinical Practice 1	2
	Credits	13
<b>Semester 3</b>		
524-140	PTA Professional Issues 1	2
524-144	PTA Principles of Neuromuscular Rehabilitation	4
524-146	PTA Principles of Cardiopulmonary & Integumentary Conditions	3
524-148	PTA Clinical Practice 2	3
809-198	Introduction to Psychology	3
	Credits	15
<b>Semester 4</b>		
524-149	PTA Rehab Across the Lifespan	2
524-150	PTA Professional Issues 2	2
524-151	PTA Clinical Practice 3	5
809-172	Introduction to Diversity Studies	3
	Credits	12
	Total Credits	70

## General Education Courses Within Program

Code	Title	Credits
801-195	Written Communication	3
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
806-177	General Anatomy and Physiology	4
809-172	Introduction to Diversity Studies	3
809-198	Introduction to Psychology	3
806-179	Advanced Anatomy and Physiology	4

## Radiation Safety/Health Physics

Associate Degree  
10-624-2

Increasing the use of radiation and radioactive materials in today's world has created a demand for nuclear technicians especially in Janesville and Beloit, Wisconsin where the Department of Energy Nuclear Security Administration has approved Shine Medical Technologies and NorthStar Medical Radioisotopes, Inc. to build production plants in the next 2-3 years.

The Radiation Safety/Health Physics Associate's Degree program offers individuals who are employed in the industry a unique opportunity to obtain specialized training to work with radioactive materials. In addition to being a high demand field, it also pays extremely well. In fact, according to the Department of Labor website, the median starting salary for this field in 2015 was \$38.59 per hour! It's also an excellent springboard for a four-year degree in health physics and radiation safety.

### SHARED PROGRAM

Designed as a shared program with Lakeshore Technical College (LTC) (<https://gotoltc.edu/academics/programs-of-study/radiation-safety-health-physics/>), classes may be offered in traditional classroom settings, online, or using Interactive Television (ITV) to link instruction from both Blackhawk and LTC. In some cases, students may be asked to attend classes outside of their current district. Check with a program adviser for more details or visit the program page on the LTC website (<https://gotoltc.edu/academics/programs-of-study/radiation-safety-health-physics/>) for more information.

This program is designed for working adults in the Nuclear/Radiation/Health Physics industry. It is an online program that allows participants to access both archived and live synchronous lectures in the 10624 courses. Most classes have prerequisites and the program is constructed without lab components, therefore, students should work with their industry supervisor to identify suitable activities at their worksite.

### Program Outcomes

- Work safely within industrial and radiological hazard areas.
- Understand and communicate nuclear technology-related concepts effectively in both oral and written formats.
- Perform radiological surveys for radiation and radioactive contamination.
- Follow procedures for operating and maintaining systems and equipment at nuclear facilities.

- Participate in applying nuclear technologies to a variety of industrial, medical, and research processes.
- Apply knowledge in a variety of related occupational jobs such as reactor plant operations, maintenance, quality assurance, etc.

## Potential Employment Opportunities

- Nuclear Monitoring Technician
- Occupational Health and Safety Technician
- Neurodiagnostic Technologist
- Surgical Technologist
- Respiratory Therapy Technician

## Radiography

Associate Degree  
10-526-1

Radiography prepares individuals for a career in diagnostic radiology (X-Ray) as a radiographer. The radiographer is a technologist who produces images of the human body to aid physicians in the diagnosis of injuries and diseases. Graduates of the program are eligible to take the entry-level certification examination administered by the American Registry of Radiography Technologists (ARRT) and may obtain employment in the x-ray departments associated with hospitals, medical clinics, veterinary clinics, and private offices. Program curriculum focuses on theoretical and applied radiography and includes a clinical experience in a radiographic department. The program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). Students learn to use x-ray imaging machines to demonstrate body parts on x-ray films for diagnostic purposes, including diagnostic radiology, bedside and trauma procedures, pediatric radiography, and special procedures.

### Program Outcomes

- Carry out the production and evaluation of radiographic images
- Practice radiation safety principles
- Provide quality patient care
- Model professional and ethical behavior consistent with the A.R.R.T. Code of Ethics
- Apply critical thinking and problem solving skills in the practice of diagnostic radiography

*The methodology used to evaluate and assess the radiography outcomes is provided in detail to students during the new student orientation and is available to applicants of the program upon request.*

View the entire course listing (p. 85).

All students enrolled in the Blackhawk Technical College Associate Degree Radiography Program must progress through the radiography program curriculum (e.g. all courses starting with the prefix 526) in the sequence prescribed by the program, without exception.

Course	Title	Credits
<b>Courses Taken Prior to Program Entry</b>		
801-136	English Composition 1	3
806-177	General Anatomy and Physiology	4
	Credits	7

**Semester 1 (Summer)**

526-158	Introduction to Radiography	3
526-168	Radiography Clinical 1	2
Credits		5

**Semester 2 (Fall Year 1)**

526-149	Radiographic Procedures 1	5
526-159	Radiographic Imaging 1	3
526-192	Radiography Clinical 2	3
Credits		11

**Semester 3 (Spring Year 1)**

526-191	Radiographic Procedures 2	5
526-230		2
526-193	Radiography Clinical 3	3
801-198	Speech	3
Credits		13

**Semester 4 (Summer)**

526-199	Radiography Clinical 4	3
Credits		3

**Semester 5 (Fall Year 2)**

526-194	Imaging Equipment Operation	3
526-231		2
526-195	Radiographic Quality Analysis	2
526-190	Radiography Clinical 5	2
809-196	Introduction to Sociology	3
Credits		12

**Semester 6 (Spring Year 2)**

526-189	Radiographic Pathology	1
526-197	Radiation Protection and Biology	3
526-174	ARRT Certification Seminar	2
526-198	Radiography Clinical 6	2
809-198	Introduction to Psychology	3
Credits		11
Total Credits		62

The Blackhawk Technical College Associate Degree Radiography program is accredited by the Joint Review Committee on Education Radiologic Technology (<http://www.jrcert.org/>) (JRCERT), 20 Wacker Dr., Suite 20, Chicago, IL 60606-3182, (312) 704-5300. <http://www.jrcert.org> (<http://www.jrcert.org/>)

Graduates of the BTC radiography are eligible to sit for the certification examination in radiography prepared by the American Registry of Radiologic Technologies (<https://www.arrt.org/>) (ARRT). <https://www.arrt.org> (<https://www.arrt.org/>)

**Program Mission**

The mission of the Blackhawk Technical College Associate Degree Radiography program is to prepare the Student to Practice Entry-Level Diagnostic Medical Radiography.

**Program Goals**

- Students Will Perform Competent Radiography
- Students Will Communicate Effectively

- Students Will Use Critical Thinking and Problem Solving Skills
- Students Will Demonstrate Professionalism

**Sales Management**

*Associate Degree*

*10-104-2*

Learners in the Sales Management learn and apply the basics of excellent customer service and progress through advanced selling techniques and sales force management. Our Sales Management program prepares you for a leadership position by giving you a comprehensive background in business practices and principles, finance, marketing, supervision, and project management. Whether you have just decided on a career in sales, or are already in the sales force and would like to move into a management position, you will develop valuable skills that can lead to greater opportunities.

**Program Outcomes**

- Incorporate customer service principles into client or customer interaction.
- Prepare selling strategies
- Demonstrate leadership capabilities to achieve organizational goals
- Integrate appropriate sales tools into the selling process
- Analyze business information to support planning and decision making

**Graduates Have Found Employment As**

Sales Associate

Customer Service Representative

Inside/Outside Sales Representative

Retail Sales Representative

Business Associate

<b>Semester 1</b>		<b>Credits</b>
102-148	Introduction to Business and Management	3
103-138	Word Documents	2
104-100	Social Media Marketing 1	1
104-104	Selling Principles	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
801-136	English Composition 1	3
Credits		15

<b>Semester 2</b>		
102-115	Management Principles	3
104-101	Social Media Marketing 2	1
104-134	Principles of Inside Sales	3
104-135	Quality Customer Service	3
809-198	Introduction to Psychology	3
102-160	Business Law	3
Credits		16

**Semester 3**

101-111	Accounting I	4
104-102	Marketing Principles	3
104-136	Principles of Outside Sales	3
104-112	Social Media Marketing 3	1
801-198	Speech	3
Credits		14

**Semester 4**

102-155	Introduction to Project Management	3
102-130	Business Finance and Budget Management	3
104-139	Advanced Professional Selling	3
104-141	Sales Team Management	3
104-142	Sales Management Practicum	1
809-143 or 809-122	Microeconomics or Intro to American Government	3
Credits		16
Total Credits		61

**General Education Courses Within Program**

Code	Title	Credits
801-195	Written Communication	3
801-198	Speech	3
804-134	Mathematical Reasoning	3
809-143	Microeconomics	3
809-198	Introduction to Psychology	3

**Substance Use Disorder Counseling**

*Associate Degree  
10-550-1*

The Substance Use Disorder Counseling (SUDC) Associate Degree program is designed to prepare students to work with individuals with substance use disorders. Students will explore areas of assessment, case management, counseling, education and professional responsibility. Students will also develop and apply the skills necessary to work in a variety of agency settings offering substance abuse treatment and recovery services.

In addition, the SUDC program satisfies the 100-hour educational component for licensing as a Substance Abuse Counselor in Training and the 360-hour educational component for licensing as a Substance Abuse Counselor and Clinical Substance Abuse Counselor as required by the State of Wisconsin Department of Safety and Professional Services (DSPS). A student may apply for their in training license through the State of Wisconsin DSPS as soon as the 100 hours of education are completed in this program at Blackhawk Technical College and start working in the field to gain hours of experience needed for licensure as a Substance Abuse Counselor or a Clinical Substance Abuse Counselor."

All students admitted to the SUDC program must complete a full background check through Castlebranch before registering for courses in the program.

**Program Outcomes**

- Clinically evaluate for substance use disorders and treatment needs
- Develop treatment plans
- Facilitate referral to meet needs
- Demonstrate service coordination skills
- Demonstrate counseling skills with individuals, groups and families
- Provide education relevant to substance use
- Maintain clinical records according to agency, federal and state guidelines
- Adhere to accepted culturally competent, ethical and behavioral conduct

**Graduates Have Found Employment As**

- Substance Use Disorder Counselor
- Substance Use Disorder Counselor Aide
- Residential Substance Use Disorder Counselor
- Treatment Counselor

Resident Manager

<b>Semester 1</b>		<b>Credits</b>
520-100	Introduction to Human Services	3
520-101	Community Resources and Services	3
809-198	Introduction to Psychology	3
520-105	Intro to Addiction and Substance Abuse Disorders	3
801-136	English Composition 1	3
Credits		15
<b>Semester 2</b>		
809-196	Introduction to Sociology	3
801-198	Speech	3
520-103	Interviewing Principles & Documentation	3
520-106	Professional Practices in Human Services	3
550-115	Understanding Addiction	3
Credits		15
<b>Semester 3</b>		
804-134	Mathematical Reasoning	3
520-109	Group Facilitation	3
550-120	Psychopharmacology	3
550-160	Substance Use Disorders Internship 1	3
520-113	Rehabilitation Services	3
Credits		15
<b>Semester 4</b>		
550-100	Substance Use Assessment, Diagnosis & Treatment	3

550-119	Substance Use Disorder Counseling	3
550-139	Substance Use Disorders Internship 2	3
550-118	Boundaries & Ethics in Substance Use Treatment	3
550-161	Motivational Interviewing	3
Credits		15
Total Credits		60

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
804-134	Mathematical Reasoning	3
809-196	Introduction to Sociology	3
809-198	Introduction to Psychology	3

## Supply Chain Management

*Associate Degree*  
10-182-1

This Associate of Applied Science degree is a four-semester program composed of 64 college credit hours designed for students who plan to seek employment in the area of supply chain management upon graduation. The program prepares students to enter jobs, be productive with a minimum of on-the-job training, and advance to a position of increased responsibility with emphasis on project management and process improvement skills. In addition to the degree, students will be provided with the opportunity to become certified as a Six Sigma Green Belt and also as a Certified Technician through the Manufacturing Skills Standards Council.

Supply chain management includes a broad range of occupational titles. Those listed below are commonly found in industry, but specific titles will vary according to each individual employer. With additional education and/or work experience, Supply Chain Management program graduates may have additional opportunities in managerial roles such as plant manager, operations manager, production manager, warehouse manager, purchasing manager, inventory manager, distribution manager, transportation manager, logistics manager, and supply chain manager, among others.

Upon successful completion of this program, students will be able to:

- Define supply chain concepts and understand the flow of materials, information and money.
- Demonstrate their ability to plan for, purchase and manage inventories and identify its impact on organizations.
- Develop negotiation abilities and their capacity to understand and predict behaviors in competitive situations.
- Evaluate supply chain costs and the profitability that stems from effective management practices.
- Apply continuous improvement strategies to all aspects of supply chain management.
- Examine the importance of customer service in effectively coordinating supply chain activities.

- Exhibit effective collaboration, decision making, problem-solving, and conflict resolution skills.

Semester 1		Credits
102-131	Introduction to Business Sustainability	1
102-148	Introduction to Business and Management	3
182-103	Introduction to Supply Chain Management	3
103-138	Word Documents	2
801-136	English Composition 1	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
Credits		15

Semester 2		
101-111	Accounting I	4
102-132	Lean Operations	1
103-107	Intermediate Excel	2
182-104	Inventory Management	3
801-198	Speech	3
809-143	Microeconomics	3
Credits		16

Semester 3		
102-115	Management Principles	3
102-155	Introduction to Project Management	3
102-160	Business Law	3
182-107	Distribution & Logistics	3
804-189	Introductory Statistics	3
196-159	Essentials of Quality 3	1
Credits		16

Semester 4		
102-121	Customer Service Management	3
102-134	Lean Six Sigma	3
182-105	Negotiations	1
182-106	Purchasing	3
182-108	Supply Chain Management Internship	2
809-198	Introduction to Psychology	3
Credits		15
Total Credits		62

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
801-136	English Composition 1	3
804-189	Introductory Statistics	3
809-143	Microeconomics	3
804-134	Mathematical Reasoning	3

or 804-118	Intermediate Algebra with Applications	
809-198	Introduction to Psychology	3

## Surgical Technology

Associate Degree  
10-512-1

Surgical technologists are allied health professionals who are an integral part of the team of medical practitioners providing surgical care to patients in a variety of settings.

The surgical technologist works under medical supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual works under the supervision of a surgeon to ensure that the operating room or environment is safe, that equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety.

A surgical technologist possesses expertise in the theory and application of sterile and aseptic technique and combines the knowledge of human anatomy, surgical procedures, and implementation tools and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures.

### Program Outcomes

1. Apply healthcare and technological science principles to the perioperative environment.
2. Maintain principles of sterile technique in the surgical environment.
3. Provide a safe, efficient and supportive environment for the patient.
4. Prepare the patient, operating room and surgical team for the preoperative phase.
5. Perform intraoperative case management in the scrub role.
6. Perform postoperative case management.
7. Function as an ethical, legal and professional member of the healthcare team as determined by governing bodies.

### Graduates Have Found Employment As

#### Career/Job Titles

Surgical Technologist  
Central Supply Technician  
Claims approver  
Private Scrub Technologist  
Scrub Surgical Technologist  
Second Assisting Technologist  
Laser/Endoscopic Technician  
Tissue/Organ Procurement

Courses taken before semester 1		Credits
806-177	General Anatomy and Physiology	4
501-101	Medical Terminology	3
	Credits	7

#### Semester 1

512-125	Introduction to Surgical Technology	4
512-126	Surgical Technology Fundamentals 1	4
512-127	Exploring Surgical Issues	2
806-179	Advanced Anatomy and Physiology	4
	Credits	14

#### Semester 2

512-128	Surgical Technology Fundamentals 2	4
512-129	Surgical Pharmacology	2
512-130	Surgical Skills Application	2
806-197	Microbiology	4
801-136	English Composition 1	3
	Credits	15

#### Semester 3

801-198	Speech	3
512-131	Surgical Interventions 1	4
512-132	Surgical Technology Clinical 1	3
512-133	Surgical Technology Clinical 2	3
809-198	Introduction to Psychology	3
	Credits	16

#### Semester 4

809-196 or 809-172	Introduction to Sociology or Introduction to Diversity Studies	3
512-135	Surgical Technology Clinical 3	3
512-136	Surgical Technology Clinical 4	3
512-142	Surgical Interventions 2	4
	Credits	13
	Total Credits	65

### General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
806-177	General Anatomy and Physiology	4
806-179	Advanced Anatomy and Physiology	4
806-197	Microbiology	4
809-196 or 809-172	Introduction to Sociology Introduction to Diversity Studies	3
809-198	Introduction to Psychology	3
801-136	English Composition 1	3

### Technical Studies Journeyworker

Associate Degree



**10-499-5**

The WTCS Technical Studies – Journeyworker AAS (10-499-5) is designed to help you achieve your career goals through academic recognition of both the related instruction and on-the-job learning that you completed through registered apprenticeship. As a member of the USDOL-OA-sponsored Registered Apprenticeship – College Credit (RACC) Consortium, the WTCS recognizes credit recommendations among RACC partners.

**How does it work?**

All WTCS colleges recognize successful completion of an apprenticeship program with at least 400-hours of paid related instruction provided through a WTCS college and possession of a Certificate of Apprenticeship (completion) issued by the Wisconsin Department of Workforce Development – Bureau of Apprenticeship Standards as fulfilling the 39-credit minimum Technical Studies requirement of the 60-credit Technical Studies – Journeyworker degree. In addition, students must complete 21 general education credits to meet the 60-credit degree requirement. Advanced standing for apprentice-related instruction taken at other accredited institutions is currently determined on an individual basis using established Credit for Prior Learning procedures. RACC recommendations are accepted. Review the Degree Completion Requirements below for more information.

Please Note: Tuition and fees vary by program. Please contact your program advisor for more information.

## TECHNICAL DIPLOMAS

Technical programs are based on local needs of business and industry and are designed to assist those preparing for entry into, or advancing in, an occupation.

Technical Diploma programs may be less than one year, one year or two years in length. Occupational skills coursework comprises a minimum of 80 percent of the total class time spent in these programs. Supportive related course work may constitute the remaining curricular requirements. Related instruction for apprenticeship is included as a Technical Diploma program.

### Administrative Support Professional

*One-Year Technical Diploma*  
31-106-3

Blackhawk Technical College's Administrative Support Professional program is designed to provide challenging hands-on experience for the ever-evolving environment of the office. This one-year program develops knowledge of office procedures and professionalism along with the basics of creating, formatting and editing business documents. Students will also learn how to plan and schedule meetings and appointments; organize and maintain paper and electronic files; manage projects; conduct research; and disseminate information by using the telephone, mail services, and Microsoft Office applications. The coordination of travel and guest arrangements will also be studied.

#### Program Outcomes

- Demonstrate effective workplace communications
- Apply technology skills to business and administrative tasks
- Perform routine administrative procedures
- Manage administrative projects
- Maintain internal and external relationships
- Model professionalism in the workplace

#### Graduates Have Found Employment As

- Administrative Professional
- Administrative Coordinator
- Administrative Specialist
- Customer Service Assistant
- Project Coordinator
- Support Professional

View the entire course listing (p. 85).

Semester 1		Credits
106-127	Administrative Office Communications	3
103-138	Word Documents	2
103-129	Intro to MS Publisher & Desktop Publishing	1
103-132	Intro to Adobe Illustrator & Typography	1
203-131	Intro to Digital Photography & Color	1

103-133	Intro to Photoshop - Designing and Editing	1
106-144	Meeting and Event Planning	2
801-136	English Composition 1	3
Credits		14

#### Semester 2

103-134	Intro to InDesign & Layout	1
201-100	Graphic Design 1	1
106-142	Customer Service Essentials	1
102-148	Introduction to Business and Management	3
201-101	Graphic Design 2	1
201-102	Graphic Design 3	1
196-168	Organizational Development	3
196-193	Human Resource Management	3
Credits		14
Total Credits		28

### General Education Courses Within Program

Code	Title	Credits
804-134	Mathematical Reasoning	3
or 804-118	Intermediate Algebra with Applications	
801-136	English Composition 1	3

### Advanced Emergency Medical Technician

*Short-Term Technical Diploma*  
30-531-6

The EMT typically represents one of the first components of the emergency medical system. This course prepares individuals to care for patients at accident scenes and transport by ambulance to the hospital under medical direction. The course emphasizes emergency skills such as managing respiratory and cardiac emergencies, medical emergencies, trauma emergencies and patient assessment, and teaches these skills in a job-related context.

Semester 1		Credits
531-111	Advanced EMT/Int-Tech	4
Credits		4
Total Credits		4

### Agribusiness Specialist

*One-Year Technical Diploma*  
31-006-1

The Agribusiness Specialist program is a one-year technical diploma program providing students with the necessary skills and internship experience for future agriculture employment in a variety of settings. Topics within this program include: production, agricultural service and supply, agricultural marketing and sales, agricultural research, direct marketing as it pertains to agribusiness and agri-tourism. Students in the program will increase their skills in agribusiness management and marketing, agronomy, livestock management and nutrition, safe and sustainable agriculture practices, and renewable energy applications.

This technical diploma program will utilize associate degree level courses and content which may articulate to two-year and four-year agriculture degrees.

This program is offered at the Monroe Campus.

## Program Outcomes

Upon completion of this program, you will be able to:

- Apply relevant Technologies
- Investigate Opportunities in Agriculture
- Interact as a professional in Agriculture

## Graduates Have Found Employment As

- Farm, Ranch and other Agricultural assistant manager
- Chemical/Fertilizer Applicator
- Crop Scouting Associate
- Agricultural product Sales
- Agricultural Research Technician
- Agricultural Marketing Technician
- Nutrient Management Specialist
- Seed, Feed, Chemical, Fertilizer Associate

View the entire course listing (p. 85).

Semester 1		Credits
006-102	Emerging Agriculture Technologies	2
006-116	Introduction to Soils	3
102-148	Introduction to Business and Management	3
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
006-108	Commercial Drivers Training	1
006-101	Contemporary Issues in Sustainability	1
006-169	Career Develop in Agriculture	2
Credits		18
Semester 2		Credits
006-105	Nutrient Management	3
006-106	Agribusiness Occupational Experience	1
006-107	Pest Management:Applicator Training	3
006-160	Introduction to Plant Science	3
006-180	Introduction to Animal Science	3
006-103	Agricultural Commodity Marketing	1
006-162	Farm Records and Business Management	3
Credits		17
Total Credits		35

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3

## Automotive Technician

*Two-Year Technical Diploma  
32-404-2*

Automotive Service Technicians diagnose and repair performance problems in cars. They also perform factory recommended maintenance procedures on new cars and trucks. The Blackhawk Technical College Automotive Technician Program is an Automotive Service Excellence (ASE) Certified two-year program aimed at preparing the student for passing ASE exams as the requisite professional experience is obtained. The program is designed to increase knowledge and skills in the areas of diagnostic testing, use of hand and machine tools, automotive parts, service references, computerized equipment and other technical equipment on ever more complex automobiles. Students are taught through practical shop and classroom experiences.

## Program Outcomes

- Demonstrate professionalism appropriate for the auto service industry.
- Perform diagnosis, service, and repair of automotive internal combustion engines.
- Perform diagnosis, service, and repair of automotive automatic transmission/transaxle systems.
- Perform diagnosis, service, and repair of automotive manual drive train and axles systems.
- Perform diagnosis, service, and repair of automotive steering and suspension systems.
- Perform diagnosis, service, and repair of automotive brake systems.
- Perform diagnosis, service, and repair of automotive electrical/electronic systems.
- Perform diagnosis, service, and repair of automotive heating and air conditioning systems.
- Perform diagnosis, service, and repair of automotive engine performance systems.

## Graduates Have Found Employment As

- Automotive Line Technician
- Automotive Specialty Technician
- Diagnostic Technician
- Service Manager
- Parts Manager
- Automotive Equipment and Part Sales
- Automotive Business Owner/Manager

View the entire course listing (p. 85).

Semester 1		Credits
404-650	Service Fundamentals 1	1
404-651	Service Fundamentals 2	1
404-652	Brake Service 1	1
404-653	Brake Service 2	1
404-654	Brake Service 3	1
404-655	Brake Service 4	1
404-656	Steering & Suspension 1	1
404-657	Steering & Suspension 2	1
404-658	Steering & Suspension 3	1
404-659	Steering & Suspension 4	1
404-660	Auto Machine Shop	1
404-661	Service Simulation	2
804-306	Shop Mathematics I	2
Credits		15

Semester 2		Credits
404-662	Engine Repair 1	1
404-663	Service Management	1
404-664	Engine Repair 2	1
404-665	Engine Repair 3	1
404-666	Engine Repair 4	1
404-667	Drive Train Service 1	1
404-668	Drive Train Service 2	1
404-669	Drive Train Service 3	1
404-670	Heating & Air Conditioning Service 1	1
404-671	Heating & Air Conditioning Service 2	1
404-672	Heating & Air Conditioning Service 3	1
404-673	Heating & Air Conditioning Service 4	1
801-311	Communication	2
Credits		14

Semester 3		Credits
404-674	ASE Certification Review	1
404-675	Electrical Service 1	1
404-676	Electrical Service 2	1
404-677	Electrical Service 3	1
404-678	Electrical Service 4	1
404-679	Electronic Engine Control Fundamentals 1	1
404-680	Electronic Engine Control Fundamentals 2	1
404-681	Electronic Engine Control Fundamentals 3	1
404-682	Electronic Engine Control Fundamentals 4	1
404-683	Electronic Engine Control Diagnosis 1	1
404-684	Electronic Engine Control Diagnosis 2	1
404-685	Emission Control Service and Certification	1

806-315	Applied Science	2
Credits		14
Semester 4		Credits
404-686	Computerized Fuel Systems Service 1	1
404-687	Computerized Fuel Systems Service 2	1
404-688	Engine Performance Testing 1	1
404-689	Engine Performance Testing 2	1
404-690	Engine Performance Testing 3	1
404-691	Engine Performance Testing 4	1
404-692	Drive Train/Transaxle Testing 1	1
404-693	Drive Train/Transaxle Testing 2	1
404-694	Service Internship	2
404-695	Customer Service Fundamentals	2
Credits		12
Total Credits		55

## General Education Courses Within Program

Code	Title	Credits
801-311	Communication	2
804-306	Shop Mathematics I	2
806-315	Applied Science	2

## Central Service Technician

### Short-Term Technical Diploma

#### 30-534-1

Central Service Technicians (CST) are the key persons responsible for maintaining the quality of medical products that are processed, packaged and sterilized by a hospital. This program will prepare individuals to clean, sterilize and assemble surgical instruments, equipment and supplies for use in operating rooms and other medical and surgical facilities. The content includes instruction in sterilization, infection control, decontamination, and surgical instrumentation processing, distribution and record keeping.

The CST program shares two courses with Surgical Technology program: Medical Terminology and Microbiology, and will share many of the same clinical sites. This overlap will give students exposure to the Surgical Technician job role.

1. Apply principles of infection control in the role of the Central Service Technician.
2. Decontaminate instruments and equipment.
3. Prepare instruments, equipment and supplies.
4. Apply sterilization techniques.
5. Perform inventory control and distribute
6. Function as an ethical, legal and professional member of the healthcare team.

Central service technicians, also called sterile processing technicians or central service (CS) professionals, have a key role in preventing infection by sterilizing, cleaning, processing, assembling, storing, and distributing medical supplies. The central service technician works in the central service department of a hospital or surgery center which is the hub of all activity surrounding supplies and equipment needed for surgery and patient care.

Central service technicians learn the principles of sterilization and sterile processing which is the cleaning medical supplies and preparing them to be used again.

Code	Title	Credits
534-302	Central Service Fundamentals	5
534-303	Central Service Clinical Practices	2
501-101	Medical Terminology	3

## Computer Numeric Control (CNC) Technician

*Two-Year Technical Diploma  
32-444-1*

This two-year technical diploma program is designed to provide students with a broad technical background in both job-shop and production machining. The CNC Technician program was developed using the National Institute for Metalworking Standards (NIMS) and National Tooling & Machining Association standards. The courses are delivered in such a way to allow the students to experience a "hands-on" approach to learning. Furthermore, each student will spend his or her time learning in a practical setting.

Using the CNC/CAM software and equipment, including a four axis machining center, you will learn to select the proper tools and fixtures required to machine parts. A graduate of the program should be proficient in metal machining operations and planning procedures, demonstrating practical machining techniques in accordance with engineering drawing specifications.

Topics of study include Computer Numerical Control (CNC) programming; Computer Assisted Manufacturing (CAM) software; precision measuring devices including a CMM; precision CNC mills, CNC training and machining centers; blueprint reading; and applied shop mathematics. To complete the program, an internship is required.

## Program Outcomes

- Apply basic safety practices in the machine shop
- Interpret industrial/engineering drawings
- Apply precision measuring methods to part inspection
- Perform basic machine tool equipment set-up and operation
- Perform programming, set-up and operation of CNC Machine Tools
- Perform advanced CNC machining operations

## Graduates Have Found Employment As

- CNC Technician
- CNC Programmer
- CNC Machinist
- CNC Operator
- Machine Tool Operator
- Apprentice Machinist
- Machine Set-up Person
- Tool Room Machinist
- Maintenance Machinist

View the entire course listing (p. 85).

Semester 1		Credits
420-131	Manual Milling 1	1
420-132	Manual Milling 2	1
420-133	Lathe - Manual Basic 1	1
420-134	Lathe - Manual Basic 2	1
444-104		1
444-105		1
422-115	Metrology - Basic	1
422-116	Metrology - Table Techniques	1
444-108		1
420-135	Secondary Operations - Drill Press	1
444-110		1
444-111		1
804-306		2
Credits		14

Semester 2		Credits
420-136	Lathe - Manual Intermediate	1
420-137	Lathe - Manual Advanced	1
420-138	Milling - Manual Intermediate	1
420-139	Milling - Manual Advanced	1
444-116		1
444-117		1
420-140	Surface Grinding Operations	1
444-119		1
420-141	Milling - Advanced Setups & Tooling	1
420-142	Lathe - Advanced Setups & Tooling	1
606-171	GD&T Interpretations	1
804-308		2
Credits		13

Semester 3		Credits
444-145		1
444-122		1
422-117	Advanced Metrology Concepts	1
606-172	Basic CAD - Solidworks and AutoCAD	1
606-175	Intermediate CAD - Solidworks and AutoCAD	1
444-126		1

444-127	1
444-128	1
444-129	1
444-130	1
444-131	1
806-118	3
<hr/>	
Credits	14
<b>Semester 4</b>	
444-132	1
444-133	1
444-134	1
444-135	1
444-136	1
444-137	1
444-138	1
444-139	1
444-140	1
444-141	1
444-142	1
444-143	1
801-311	2
<hr/>	
Credits	14
<hr/>	
Total Credits	55

## General Education Courses Within Program

Code	Title	Credits
801-311		2
804-306		2
804-308		2
806-118		3

## Computer Service Technician

*One-Year Technical Diploma*  
31-450-1

The need for fully-trained, professional Computer Service and Network Technicians who are able to configure, troubleshoot, and support today's complex PC-based computing systems confidently and expertly is quickly evolving. This need is being driven by the rapid evolution in the power and complexity of PC hardware and software applications, as well as by the accelerating movement from stand-alone PC's to highly integrated networks.

This practical program provides extensive hands-on training with PC hardware, operating systems, and networks needed to keep PC-based system operational and functioning at peak efficiency. Graduates of this program have the knowledge, attitudes, skills, and habits needed to guide and implement the systematic enhancement of PC-based system as the technology continues to evolve.

## Program Outcomes

- Apply effective customer satisfaction and field service techniques.
- Evaluate and repair PC hardware components.

- Evaluate and administer PC software applications.
- Evaluate and apply PC system and peripheral communication.
- Repair PC peripheral hardware and related systems.
- Compare LAN and WAN physical and logical fundamentals.
- Evaluate, administer, and repair network hardware.
- Apply PC system evaluation, installation, configuration, diagnosis and repair skills in the workplace.

## Graduates Have Found Employment As

- Computer Service Technician
- Computer Support Specialist
- Service Support Specialist
- Service Engineer
- Help Desk Specialist
- Field Service Engineer
- Field Service Technician
- Communications Technician
- LAN Support Specialist
- Network Technician
- Network Installer

View the entire course listing (p. 85).

Semester 1		Credits
631-124	Microcomputer Fundamentals: PC Components	1
631-125	Microcomputer Fundamentals 2: PC Assembly	1
631-126	Microcomputer Fundamentals 3: Intro to Web Programming	1
631-127	PC Software Fundamentals 1: Operating Systems	1
631-128	PC Software Fundamentals 2: Software Applications	1
631-129	PC Software Fundamentals 3: Troubleshooting Operating Systems	1
631-130	PC Peripherals and Troubleshooting 1: Peripherals	1
631-131	PC Peripherals and Troubleshooting 2: Printers & Laptops	1
631-132	PC Peripherals and Troubleshooting 3: Troubleshooting Hardware	1
631-133	IT Customer Service Fundamentals 1	1
631-134	IT Customer Service Fundamentals 2	1
631-135	IT Customer Service Fundamentals 3	1
631-111	PC Hardware Assessment	1
801-195	Written Communication	3
<hr/>		
Credits		16
<b>Semester 2</b>		
631-112	PC Hardware Interfacing	1



631-136	Network Fundamentals 1	1
631-137	Network Fundamentals 2	1
631-138	Network Fundamentals 3	1
631-139	Troubleshooting Network Resources 1	1
631-140	Troubleshooting Network Resources 2	1
631-141	Troubleshooting Network Resources 3	1
150-169	Introduction to Enterprise Virtualization 1	1
150-170	Introduction to Enterprise Virtualization 2	1
150-171	Introduction to Enterprise Virtualization 3	1
631-142	Cyber Ethics 1	1
631-143	Cyber Ethics 2	1
631-144	Cyber Ethics 3	1
631-122	Service Support Internship	1
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
Credits		17
Total Credits		33

## General Education Courses Within Program

Code	Title	Credits
801-195	Written Communication	3
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3

## Culinary Production Specialist

*One-Year Technical Diploma*  
31-316-2

The Culinary Production Specialist One-Year Technical Diploma gives students the hands-on skills as well as technical and professional knowledge they need to start a career in the culinary industry within restaurants, catering services, hotels, healthcare facilities and schools.

Students are prepared for careers such as Line Cooks, Prep Cooks, Broiler Chefs through in class and practical, on-the-job experiences within the local food industry.

### Program Outcomes

- Enforce health and safety standards
- Demonstrate food prep skills
- Adapt procedures to meet changing needs
- Manage food storage, inventory and cost control

## Graduates have found employment as

- Prep Cooks/Cooks
- Line Cooks
- Broiler Chefs or Garde Managers
- Sous Chefs
- Executive Chefs or Owner/Operators

Semester 1		Credits
316-104	Food Quantities and Measures	1
316-109	Quantity Production of Soups, Salads ,and Dressings	4
316-111	Culinary Externship Adv I	4
316-131	Advanced Cuisine	2
316-147	Food Service Sanitation	2
Credits		13
Semester 2		Credits
316-112	Culinary Externship Adv II	5
316-114	Quantity Production of Entrees, Sauces and Vegetables	4
316-136	Catering, Special Events and Contract Food Service	2
316-164	Global Cuisine	2
Credits		13
Total Credits		26

## Dental Assistant

*One-Year Technical Diploma*  
31-508-1

The Dental Assistant Program prepares graduates to work with dentists as they examine and treat patients. Dental Assistants with documented skills also may carry out a variety of laboratory, clinical and office duties. Some dental assistants manage the office and are responsible for patient scheduling and bookkeeping functions. Graduates receive a technical diploma and are eligible to write the certification examination of the Dental Assisting National Board.

Most dental assistants work in general or specialized dental offices, either for individual dentists or for groups of dentists. Some dental assistants may choose to work for insurance companies, dental laboratories, or dental supply companies. The dental assistant also may find employment with federal agencies such as the Veteran's Administration, States Public Health Services, the Armed Forces, or a state, county or city health facility.

Prior to enrolling in the Dental Assistant program (508) courses, students must complete an online criminal background check. There is an additional fee associated with the background check process.

### Program Outcomes

- Perform a variety of advanced supportive dental procedures.
- Manage infection and hazard control.
- Produce diagnostic intraoral and extraoral radiographs on a variety of patients.
- Perform advanced dental laboratory procedures.

- Demonstrate professional behaviors, ethics, and appearance.
- Perform dental office business procedures.

## Graduates Have Found Employment As

- Dental Assistant
- Dental Receptionist
- Dental Office Manager
- Dental Practice Manager
- Dental Lab Technician
- Dental Insurance Claims Processor
- Dental Sales Representative
- Dental Treatment Coordinator
- Dental Specialty Assistant

View the entire course listing (p. 85).

Semester 1		Credits
508-101	Dental Health Safety	1
508-103	Dental Radiography	2
508-113	Dental Materials	2
508-302	Dental Chairside	5
508-304	Dental & General Anatomy	2
508-306	Dental Assistant Clinical	3
508-307	Dental Assistant Professionalism	1
Credits		16
Semester 2		
508-120	Dental Office Management	2
508-308	Dental Chairside Advanced	5
508-309	Dental Laboratory Procedures	4
508-310	Dental Radiography - Advanced	1
508-311	Dental Assistant Clinical Advanced	2
801-311	Communication	2
Credits		16
Total Credits		32

## General Education Courses Within Program

Code	Title	Credits
801-311	Communication	2

## Diesel & Heavy Equipment Technician

*Two-Year Technical Diploma*  
32-412-1

Diesel and heavy equipment technicians repair and maintain transportation equipment, such as heavy trucks, buses, locomotives, ships, and automobiles; construction equipment such as bulldozers, cranes, and road graders; and farm equipment such as tractors and combines. Many technicians perform a broad range of repairs from engines to electrical systems. Others specialize in repairs such as fuel and starting systems. Diesel and Heavy equipment technicians use a variety of computerized testing equipment to pinpoint and analyze malfunctions as well as numerous power and hand tools to perform repairs.

The Diesel and Heavy Equipment Technician Program is a two-year program providing job entry skills in service and repair of transportation, construction, industrial, and farm equipment. In addition to providing a foundation in the latest diesel technologies, the program improves skills needed to interpret technical manuals and communicate with coworkers and customers. Students in the program develop a broad base of skills, allowing them to enter the large and ever-expanding field of diesel and heavy equipment service and repair.

## Program Outcomes

- Diagnose major systems in diesel and heavy equipment industry
- Repair major systems in diesel and heavy equipment industry
- Service major systems in diesel and heavy equipment industry
- Practice personal and professional work habits
- Document complaint, cause and correction

## Graduates Have Found Employment As

- Diesel Mechanic
- Diesel Mechanic Apprentice
- Engine Maintenance Mechanic
- Farm Equipment Mechanic
- Service Engine Repairer
- Tune-up Mechanic
- Industrial and Construction Equipment Mechanic
- Truck Mechanic

View the entire course listing (p. 85).

Semester 1		Credits
412-450	Introduction to Heavy Diesel	1
412-451	Brake Service 1	1
412-452	Brake Service 2	2
412-453	Brake Service 3	1
412-454	Steering & Suspension 1	1
412-455	Steering & Suspension 2	1
412-456	Steering & Suspension 3	1
412-457	Steering & Suspension 4	1
412-458	Drivetrain 1	1
412-459	Drivetrain 2	1
412-460	Drivetrain 3	1
412-461	Drivetrain 4	1
804-306	Shop Mathematics I	2
Credits		15
Semester 2		
412-462	Electrical Fundamentals 1	1
412-463	Electrical Fundamentals 2	1
412-464	Electrical Fundamentals 3	1
412-465	Electrical Fundamentals 4	1
412-466	Electrical Troubleshooting 1	1
412-467	Electrical Troubleshooting 2	1
412-468	Electrical Troubleshooting 3	1
412-469	Electrical Troubleshooting 4	1

412-470	Diesel HVAC 1	1
412-471	Diesel HVAC 2	1
412-472	Diesel HVAC 3	1
801-311	Communication	2
	Credits	13

**Semester 3**

412-473	Advanced Safety Procedures	1
412-474	Engine Fundamentals 1	1
412-475	Engine Fundamentals 2	1
412-476	Engine Fundamentals 3	1
412-477	Engine Fundamentals 4	1
412-478	Engine Service Repair 1	1
412-479	Engine Service Repair 2	1
412-480	Engine Service Repair 3	1
412-481	Engine Service Repair 4	1
412-482	Engine Service Repair 5	1
412-483	Engine Service Repair 6	1
442-142	Introduction to Welding	1
442-143	Shielded Metal Arc Welding 1	1
806-315	Applied Science	2
	Credits	15

**Semester 4**

412-484	Hydraulics 1	1
412-485	Hydraulics 2	1
412-486	Hydraulics 3	1
412-487	Hydraulics 4	1
412-488	Diesel Fuel Systems 1	1
412-489	Diesel Fuel Systems 2	1
412-490	Diesel Fuel Systems 3	1
412-491	Diesel Fuel Systems 4	1
412-492	Inspection & Maintenance Procedures 1	1
412-493	Inspection & Maintenance Procedures 2	1
412-494	Inspection & Maintenance Procedures 3	1
412-495	Inspection & Maintenance Procedures 4	1
412-496	ASE Certification Review	1
	Credits	13
	Total Credits	56

**General Education Courses Within Program**

Code	Title	Credits
801-311	Communication	2
804-306	Shop Mathematics I	2
806-315	Applied Science	2

**Electric Power Distribution***One-Year Technical Diploma***31-413-2**

Vast Networks of wires and cables transmit the electric power produced in generating plants to individual customers, connect telephone central offices to customer's telephones and switchboards, and extend cable TV to residential and commercial customers. These networks are constructed and maintained by line installers and cable splicers. To install new electric power or telephone lines, line installers or line erectors install poles and terminals, erect towers, and place wires and cables. Power equipment is typically used to dig holes and set poles. Line installers climb the poles or use truck-mounted buckets (aerial work platforms) and use hand tools to attach the cables. When working with electric power lines, installers bolt or clamp insulators onto the poles before attaching the cable. They may also install transformers, circuit breakers, switches, or other equipment. To bury underground cable, they use trenchers, plows, and other power equipment.

The Electric Power Distribution program prepares a student to advance to an electric line technician apprenticeship and related occupations. Students learn how to properly climb poles and install line hardware and equipment. Safety policies and procedures will be taught and strictly adhered to. Students will learn motor vehicle operation and maintenance, attain a working knowledge of ropes and rigging, proper application of rubber protective equipment and use of hot sticks. Students will also study and apply mapping and laying out lines for construction. Students will set poles at proper depth, install guys and anchors of the required strength to hold various lines.

*AC and DC current will be taught along with Introduction to Fundamentals of Electricity.*

**Program Outcomes**

- Perform installation, maintenance and repair operations in compliance with published safety standards.
- Acquire appropriate resources to perform necessary procedures and/or troubleshoot sequence.
- Operate tools and test equipment according to the process published in equipment manuals and/or demonstrated in class.
- Install poles and related equipment using proper specifications and accepted procedures.
- Install underground lines and related equipment using industry accepted methods and practices.
- Recognize faulty or damaged equipment and repair or replace.
- Document investment and retirement work orders, record equipment nameplate information and fill out daily time sheets.

**Graduates Have Found Employment As**

- Electric Utility Lineman
- Cable Maintenance Technicians
- Equipment Operator
- Telephone Repairman
- Cable TV Installer
- Apprentice Line Technician
- Troubleshooter
- Line Inspectors

- Substation Operator
- Cable Splicer

View the entire course listing (p. 85).

Semester 1		Credits
413-303	Industrial Electricity for Line Technicians	2
413-304	Safety Procedures I-Line Technicians	1
413-310	Electric Power Distribution 1A	5
458-101	CDL for Non Truck Driving Occupations	3
413-315	Electric Power Distribution 1B	5
804-306	Shop Mathematics I	2
Credits		18
Semester 2		Credits
413-305	Safety Procedures II-Line Technicians	1
413-307	EPD Mapping and Automation	1
413-320	Electric Power Distribution 2A	5
413-325	Electric Power Distribution 2B	5
801-311	Communication	2
806-315	Applied Science	2
Credits		16
Total Credits		34

## General Education Courses Within Program

Code	Title	Credits
801-311	Communication	2
804-306	Shop Mathematics I	2
806-315	Applied Science	2

## Emergency Medical Technician

*Short-Term Technical Diploma*  
30-531-3

The EMT typically represents one of the first components of the emergency medical system. This course prepares individuals to care for patients at accident scenes and transport by ambulance to the hospital under medical direction. The course emphasizes emergency skills such as managing respiratory and cardiac emergencies, medical emergencies, trauma emergencies and patient assessment, and teaches these skills in a job-related context. The national Registry of EMT's test is required at the completion of the course for licensure in the State of Wisconsin. The course is also a prerequisite for EMT-Advanced and EMT-paramedic training. EMT-Basic is 5 credits at 10 hours per week totaling 180 hours plus 10+ hours in a hospital emergency room setting and ambulance ride-along training.

A caregiver background check **WILL** be required for clinical portion of the program. Students must meet the immunization requirements set by the CDC.

Semester 1		Credits
531-110	Emerg Med Tech/EMT-B	5
Credits		5
Total Credits		5

## Farm Business & Production Management

*Short-Term Technical Diploma*  
30-090-1

Farming is a technology driven business, with continually evolving management practices and an ongoing need for unbiased and focused educational resources. Farm Business and Production Management is designed to deliver on these needs. Enrollment is open to any individual actively engaged in or about to enter farming including: farm owners, operators, managers, and farm/agribusiness employees. Enrollees should plan to attend regularly scheduled group instruction, as well as allow time for individual on-site instruction.

This Program is offered at the Monroe Campus.

## Program Outcomes

- Complete financial and production records necessary for business operation.
- Develop and implement a soil management plan.
- Apply appropriate cropping practices.
- Develop and apply an appropriate livestock nutrient plan.
- Implement an effective livestock management plan.
- Operate tools and equipment needed in farm business operation.
- Develop a farm business management plan.

## Graduates Have Found Employment As

- Farm Owner
- Farm Manager
- Farm Cropping Specialist
- Farm Nutrient Manager
- Herdsman
- Milking Technician
- Farm Reproductive Specialist
- Farm Record Keeper
- Farm Business Manager

View the entire course listing (p. 85).

Semester 1		Credits
090-382	Soils Management for Farm Operators	3
090-383	Crop Management for Farm Operators	3
090-384	Livestock Nutrition for Farm Operators	3
Credits		9
Semester 2		Credits
090-303	Agricultural Commodity Marketing for Farm Operators	1

090-305	Nutrient Management Planning for Farm Operators	3
090-385	Livestock Management for Farm Operators	3
090-386	Records & Business Management for Farm Operators	3
Credits		10
Total Credits		19

## Heating, Ventilation, Air Conditioning and Refrigeration Technology

*Two-Year Technical Diploma*  
32-601-1

HVAC/R is one of the fastest growing industries in the world today. With the changing laws involving refrigerants and the influx of digital control systems, there is a constant need for qualified service technicians to work on HVAC/R equipment. A service technician will have to continually update his/her skills to keep up with the changing industry.

This program will provide proper training for people interested in a career in the heating, ventilation, air conditioning and refrigeration (HVAC/R) field. The technician will be prepared for employment in a variety of areas including servicing, installing, designing, estimating and selling HVAC systems for commercial and residential applications. The most modern equipment, test instruments, and computers are used for instruction.

After completing the HVAC/R two year technical diploma program, students may wish to pursue additional training in heating, ventilation, and air conditioning engineering. Credit for many of the associate degree courses in the program may be transferred to a four-year institution.

### Program Outcomes

- Perform HVAC/R service and repair operations in compliance with published safety standards.
- Promote customer satisfaction.
- Operate tools/equipment according to process published in operator's manual and/or demonstrated in class.
- Service and/or repair/replace defective components established in equipment specific repair manual and/or electronic service information systems.
- Diagnose root cause of problems by comparing test results to an established standard.
- Efficiently complete tasks within the expected time frame for an entry level technician.

### Graduates Have Found Employment As

- HVAC/R Service Technician
- HVAC/R Service Installation Technician
- HVAC/R Sales Representatives
- HVAC/R Maintenance Technician

View the entire course listing (p. 85).

Semester 1		Credits
601-116	Air Conditioning Fundamentals for HVAC/R	1
601-117	Air Conditioning Fundamentals HVAC/R 2	1
601-118	Air Conditioning Fundamentals HVAC/R 3	1
601-121	Electrical Fundamentals for HVAC/R 1	1
601-122	Electrical Fundamentals for HVAC/R 2	1
601-123	Electrical Fundamentals for HVAC/R 3	1
601-131	Refrigeration Fundamentals 1	1
601-132	Refrigeration Fundamentals 2	1
601-133	Computerized HVAC/R Design 1	1
601-134	Computerized HVAC/R Design 2	1
601-128	Print Reading and Code 1	1
601-129	Print Reading and Code 2	1
804-306	Shop Mathematics I	2
Credits		14
Semester 2		
601-146	ACR Piping Practices 1	1
601-147	ACR Piping Practices 2	1
601-148	Refrigeration Recovery, Evacuation and Charging Methods 1	1
601-149	Refrigeration Recovery, Evacuation and Charging Methods 2	1
601-141	Heating Systems 1	1
601-142	Heating Systems 2	1
601-143	Heating Systems 3	1
601-136	Motors and Motor Controls 1	1
601-137	Motors and Motor Controls 2	1
601-138	Motors and Motor Controls 3	1
462-322	Human Relations in the Industrial Setting	2
801-311	Communication	2
Credits		14
Semester 3		
601-156	Control Circuit Applications 1	1
601-157	Control Circuit Applications 2	1
601-158	Control Circuit Applications 3	1
601-151	Air Conditioning Applications 1	1
601-152	Air Conditioning Applications 2	1
601-153	Air Conditioning Applications 3	1
601-161	Refrigeration Applications 1	1
601-162	Refrigeration Applications 2	1
601-163	Refrigeration Applications 3	1
601-171	HVAC Installation 1	1
601-172	HVAC Installation 2	1
601-173	HVAC Installation 3	1

804-308	Shop Mathematics II	2
	Credits	14
<b>Semester 4</b>		
601-176	Heating Systems Applications 1	1
601-177	Heating Systems Applications 2	1
601-178	Heating Systems Applications 3	1
601-181	Hydronic Systems 1	1
601-182	Hydronic Systems 2	1
601-183	Hydronic Systems 3	1
601-166	Electronic Energy Management Systems 1	1
601-167	Electronic Energy Management Systems 2	1
601-168	Electronic Energy Management Systems 3	1
601-184	Service and Troubleshooting HVAC/R 1	1
601-185	Service and Troubleshooting HVAC/R 2	1
601-186	Service and Troubleshooting HVAC/R 3	1
601-114	Industrial Comp Exam Review	1
	Credits	13
	Total Credits	55

## General Education Courses Within Program

Code	Title	Credits
801-311	Communication	2
804-306	Shop Mathematics I	2
804-308	Shop Mathematics II	2

## Industrial Maintenance Mechanic

*One-Year Technical Diploma*  
31-462-2

This career field offers plenty of opportunity to problem solve and work with your hands. You'll gain a high level of technical skills to prepare you for an entry-level position working with industrial machinery. Your training will include an introduction to electrical motors and safety, control devices and power systems. You'll also learn about blueprints, rigging and lifting, and computer-aided design. You'll get hands-on experience applying what you've learned in the machine shop.

### Program Outcomes

- Demonstrate safe work procedures.
- Install industrial equipment and systems.
- Maintain industrial equipment and systems.
- Troubleshoot industrial equipment and systems.
- Repair industrial equipment and systems.
- Communicate technical information.

### Graduates have found employment as:

- Industrial Maintenance Technician
- Industrial Machine Operator

### Academic Plan

<b>Semester 1</b>		<b>Credits</b>
804-306 or 804-113	Shop Mathematics I or College Technical Mathematics 1A	2
620-902	Mechanics of Learning for Industrial Technologies	1
449-425	Safety	1
620-903	Troubleshooting Integrated Manufacturing Systems 1	1
620-173	Blueprint Reading for Machine Prints	1
620-146	Mechanics 1	1
620-147	Mechanics 2	1
620-116	Fluid Power 1: Basic Pneumatics	1
620-117	Fluid Power 2: Basic Hydraulics	1
620-101	Fundamentals of DC circuits 1	1
620-102	Fundamentals of DC Circuits 2	1
620-109	Relay Logic	1
620-106	Electric Motors 1	1
801-311 or 801-136	Communication or English Composition 1	2
	Credits	16
<b>Semester 2</b>		
804-308 or 804-114	Shop Mathematics II or College Technical Mathematics 1B	2
620-171	Human Relations in the Industrial Setting Internship	2
620-113	Fundamentals of AC Circuits 1	1
620-124	Programmable Logic Controllers - PLCs	1
442-142	Introduction to Welding	1
442-143	Shielded Metal Arc Welding 1	1
620-166	Conveyor Systems 1	1
620-167	Conveyor Systems 2	1
620-170	Valves, Gaskets and Seals	1
620-174	Mechanical Power Transmission	1
620-172	Machine Setup & Installation 1	1
620-107	Variable Speed Drives 1	1
420-580	Lathes	1
420-581	Mills	1
620-904	Fluid Power 3: Intermediate Pneumatics	1



620-134	Sensors	1
	Credits	18
	Total Credits	34

## Laboratory Science Technician Assistant

*One-Year Technical Diploma*  
31-506-4

This program prepares students to provide laboratory support to the food processing, medical, environmental, and agriculture industries. They will learn to conduct or assist in laboratory analysis of food, water, fuel, soil, bodily fluids and other elements – laboratory equipment, performing tests and experiments and documenting the results. Graduates will have a strong basis in scientific principles, quality methodology and documentation, and laboratory equipment and testing methodologies.

This Program is offered at the Monroe Campus.

### Program Outcomes

- Apply modern laboratory methodologies including problem solving and troubleshooting.
- Perform and report results of laboratory tests.
- Practice laboratory safety and regulatory compliance.
- Monitor and evaluate quality control in the laboratory.
- Model professional behavior, ethics, and appearance appropriate to the laboratory setting.
- Demonstrate quantitative reasoning skills and apply critical thinking skills to a variety of disciplines.

### Graduates Have Found Employment As

- Food Lab Quality Assurance Technician
- Food Lab Technician
- Medical Lab Assistant
- Quality Control Technician

View the entire course listing (p. 85).

Semester 1		Credits
103-112	Introduction to Microsoft Excel	1
506-108	Laboratory Safety and Hazardous Materials	1
102-148	Introduction to Business and Management	3
513-110	Basic Laboratory Skills	1
806-199	General, Organic and Biological Chemistry	4
801-136	English Composition 1	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
	Credits	16
Semester 2		
506-102	Intermediate Laboratory Skills	3
506-105	Quality Concepts in Laboratories	3

506-109	Data Management for Laboratory Assistants	1
804-189	Introductory Statistics	3
806-197	Microbiology	4
801-198	Speech	3
	Credits	17
	Total Credits	33

### General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
804-189	Introductory Statistics	3
806-197	Microbiology	4
806-199	General, Organic and Biological Chemistry	4
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3
801-136	English Composition 1	3

## Law Enforcement - Basic Recruit Academy

*Short-Term Technical Diploma*

30-504-2

### About the Academy

In order to become certifiable as a police officer in Wisconsin, the State of Wisconsin - Law Enforcement Standards Board (LESB) requires successful completion of a 720 hour training curriculum (police academy training).\*\*

### Full-Time Academy - Fall/Spring Semester

The Law Enforcement Basic Recruit Academy is a program for those that are interested in a career in law enforcement. The program covers 720 instructional hours.\*\* Upon completion of the program, a student will be eligible for certification with the Wisconsin Department of Justice, Law Enforcement Training and Standards Board. The program focuses on both the theories of law enforcement and is coupled with the tactical skills necessary to be a police officer, deputy sheriff, or sworn member of law enforcement in Wisconsin.

### Part-Time Academy - Fall Semester

The part-time Law Enforcement Basic Recruit Academy is a program for those that are interested in a career in law enforcement yet may have other life commitments which prevent them from attending a traditional full-time program. The program is a full year program consisting of 720 instructional hours.\*\* Upon completion of the program, a student will be eligible for certification with the Wisconsin Department of Justice, Law Enforcement Training and Standards Board. The program focuses on both the theories of law enforcement and is coupled with the tactical skills necessary to be a police officer, deputy sheriff, or sworn member of law enforcement in Wisconsin. The program meets Monday, Tuesday and Thursday nights from 5:30 p.m. until 10:00 p.m. The program also meets every-other Saturday as scheduled. The part-time option will not be available until Fall 2016.

A part-time program was launched during the 2019-2020 Academic Year. Contact the Public Safety Division for more information at (608) 757-7691.

Semester 1		Credits
504-307		
504-308	Applications of Investigation	2
504-309	Applications of Traffic Response	2
504-310	Health and Fitness	1
504-311	Overview of Criminal Justice	1
504-312	Overview of Investigations	2
504-313	Overview of patrol Response	2
504-314	Overview of Tactics	1
504-315	Principle of Emergency Vehicle Response	2
504-316	Principles of Investigation	2
504-317	Principles of Patrol Response	2
504-318	Principles of Tactics	3
Credits		20
Total Credits		20

## Manufacturing Information Technology Specialist

*Two-Year Technical Diploma*  
32-631-1

The Manufacturing Information Technology Specialist program provides extensive hands-on training with the computer hardware, operating systems, application software, mobile devices, and networks needed to keep the systems used in every aspect of advanced manufacturing operating and functioning at peak efficiency. In addition, students will learn how to provide excellent customer service to the employees that fill the various roles they will support. Graduates of this program will have the knowledge, attitudes and skills needed to guide and implement the systematic enhancement of various types of computer systems as these technologies continue to grow and evolve.

### Program Outcomes

- Apply effective customer satisfaction and field service techniques
- Evaluate and repair PC hardware components and peripherals
- Evaluate and administer PC software applications
- Compare LAN and WAN physical and logical fundamentals
- Evaluate, administer, and repair network hardware
- Apply PC system evaluation, installation, configuration, diagnosis and repair skills in the workplace
- Perform IT related tasks in multiple environments to include office and manufacturing
- Apply basic understanding of manufacturing communication protocols.
- Evaluate, administer, and repair wireless networking components and the devices that use them.
- Evaluate and install helpdesk software
- Apply proper helpdesk services
- Evaluate, administer and troubleshoot PC and Apple devices.
- Evaluate, administer and troubleshoot Windows, Apple, and Linux operating systems
- Compare different types of virtual machine systems.

View the entire course listing (p. 85).

Semester 1		Credits
631-124	Microcomputer Fundamentals: PC Components	1
631-125	Microcomputer Fundamentals 2: PC Assembly	1
631-126	Microcomputer Fundamentals 3: Intro to Web Programming	1
631-127	PC Software Fundamentals 1: Operating Systems	1
631-128	PC Software Fundamentals 2: Software Applications	1
631-129	PC Software Fundamentals 3: Troubleshooting Operating Systems	1
631-130	PC Peripherals and Troubleshooting 1: Peripherals	1
631-131	PC Peripherals and Troubleshooting 2: Printers & Laptops	1
631-132	PC Peripherals and Troubleshooting 3: Troubleshooting Hardware	1
631-133	IT Customer Service Fundamentals 1	1
631-134	IT Customer Service Fundamentals 2	1
631-135	IT Customer Service Fundamentals 3	1
631-111	PC Hardware Assessment	1
801-136	English Composition 1	3
Credits		16
Semester 2		
631-136	Network Fundamentals 1	1
631-137	Network Fundamentals 2	1
631-138	Network Fundamentals 3	1
631-139	Troubleshooting Network Resources 1	1
631-140	Troubleshooting Network Resources 2	1
631-141	Troubleshooting Network Resources 3	1
150-169	Introduction to Enterprise Virtualization 1	1
150-170	Introduction to Enterprise Virtualization 2	1
150-171	Introduction to Enterprise Virtualization 3	1
631-142	Cyber Ethics 1	1
631-143	Cyber Ethics 2	1
631-144	Cyber Ethics 3	1

631-112	PC Hardware Interfacing	1
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
Credits		16
<b>Semester 3</b>		
631-145	Apple Devices and Operating Systems 1: Hardware	1
631-146	Apple Devices and Operating Systems 2: Operating Systems	1
631-147	Apple Devices and Operating Systems 3: Networking	1
631-148	Wireless Networking 1	1
631-149	Wireless Networking 2	1
631-150	Wireless Networking 3	1
150-157	IT Project Management 1	1
150-158	IT Project Management 2	1
150-159	IT Project Management 3	1
631-151	Manufacturing Networking 1	1
631-152	Manufacturing Networking 2	1
631-153	Manufacturing Networking 3	1
631-109	Network Portfolio 1	1
Credits		13
<b>Semester 4</b>		
631-154	Wireless Networking Implementation 1	1
631-155	Wireless Networking Implementation 2	1
631-156	Wireless Networking Implementation 3	1
631-160	Malicious Software Fundamentals 1	1
631-161	Malicious Software Fundamentals 2	1
631-162	Malicious Software Fundamentals 3	1
631-157	Linux Operating Systems 1	1
631-158	Linux Operating Systems 2	1
631-159	Linux Operating Systems 3	1
631-163	Mobile Device Fundamentals 1	1
631-164	Mobile Device Fundamentals 2	1
631-165	Mobile Device Fundamentals 3	1
631-110	Network Portfolio 2	1
631-122	Service Support Internship	1
Credits		14
Total Credits		59

## General Education Courses Within Program

Code	Title	Credits
801-311	Communication	2
804-134 or 804-118	Mathematical Reasoning Intermediate Algebra with Applications	3

## Medical Assistant

*One-Year Technical Diploma  
31-509-1*

The Medical Assistant is a link between health care providers and their patients, their professional associates, and the suppliers of equipment and medications. The Medical Assistant is the team member who assists the qualified provider in the office or other medical setting, performing administrative and/or clinical duties. Demand for the Medical assistant may also occur in business or industrial health centers, health insurance companies and emergency care centers. The Medical Assistant has a wide range of duties supportive to the provider's practice. Business/ administrative duties include scheduling and receiving patients, obtaining patient information, maintaining medical records, maintaining supplies and equipment, and assuming responsibility for office care, insurance matters, office accounts, fees and collections. Medically related duties include assisting with examinations and treatments, taking health histories, performing certain diagnostic tests, carrying out laboratory procedures and sterilizing instruments and equipment.

Students must complete an online criminal background check within the first eight weeks of the semester. There is an additional fee associated with the background check process.

### Program Outcomes

- Perform medical office administrative functions
- Provide patient care in accordance with regulations, policies, laws, and patient rights
- Perform medical laboratory procedures
- Demonstrate professionalism in a healthcare setting
- Demonstrate safety and emergency practices in a healthcare setting

Graduates find jobs as medical assistants, secretaries, medical laboratory assistants, phlebotomists, receptionists, medical insurance clerks and electrocardiogram technicians.

View the entire course listing (p. 85).

<b>Semester 1</b>		<b>Credits</b>
501-101	Medical Terminology	3
501-107	Digital Literacy for Health Care	2
509-301	Medical Assistant Admin Procedures	2
509-302	Human Body in Health & Disease	3
509-303	Medical Asst Lab Procedures 1	2
509-304	Medical Asst Clin Procedures 1	4
801-136	English Composition 1	3
Credits		19
<b>Semester 2</b>		
509-305	Medical Asst Lab Procedures 2	2
509-306	Medical Asst Clin Procedures 2	3
509-307	Med Office Insurance and Finance	2
509-308	Pharm for Allied Health	2
509-309	Medical Law, Ethics and Professionalism	2

509-310	Medical Assistant Practicum	3
	Credits	14
	Total Credits	33

## General Education Courses Within Program

Code	Title	Credits
801-136	English Composition I	3

## Nursing Assistant

*Short-Term Technical Diploma*  
30-543-1

Nursing Assistants, sometimes called Nurse Aides, Patient Care Assistants (PCA) or Patient Care Technicians (PCT), are in high demand to assist in the care of patients in extended care facilities, home care situations, and, with some additional training, in hospitals. Working under the direct supervision of a licensed nurse, their responsibilities may vary, but personal care and emotional support of patients are always primary considerations.

This 120-hour course involves classroom lectures, campus lab experiences, and a clinical practicum, which involves working in healthcare agencies with patients and residents. Students must be at least 16 years old to attend clinical practicum. Students under the age of 18 must be selected as a Youth Apprentice through their High School. Those who successfully complete this course are eligible to take the National Nurse Aide Assessment Program (NNAAP) exam to become a part of the Wisconsin Nurse Aide Registry as a CNA/HHA. The cost for this testing is not included in course fees and tuition.

### Program Outcomes

- Communicate and interact effectively with clients, family, and co-workers.
- Maintain and protect client rights.
- Report information and record observations.
- Demonstrate the ethical and legal responsibilities of the NA/HHA.
- Provide safe care to a diverse population, meeting personal, physical and psychosocial client needs.
- Assist with client rehabilitation and restorative care, promoting independence.
- Assist clients with long-term, disabling conditions including dementia, always focusing on the strengths of the client.
- Work cooperatively in a team environment.
- Eligible to take the WI NA Competency evaluation.

View the entire course listing (p. 85).

Semester 1		Credits
543-300	Nursing Assistant	3
	Credits	3
	Total Credits	3

Remove Nursing Assistant - Advanced. Total credits is 3.

## Phlebotomy Technician

*Short-Term Technical Diploma*  
30-513-1

The phlebotomy technician program prepares the learner to function as a member of the healthcare delivery team, performing the role of a phlebotomist. The phlebotomist generally works in a clinical laboratory under the supervision of the appropriate professional. He/She is responsible for collection procedures in both outpatient clinical and hospital inpatient settings for the purpose of laboratory analysis, including emergency and routine collection procedures from veins, skin puncture areas and arteries on patients of all ages.

Prior to enrolling in Phlebotomy Technician program (513) courses, students must complete an online criminal background check. There is an additional fee associated with the background check process.

### Program Outcomes

- Collect, transport, handle and process blood specimens for analysis
- Identify and select equipment, supplies and additives used in blood collection
- Recognize factors that affect specimen collection procedures and test results
- Follow infection control and safety procedures
- Demonstrate professional conduct and communication skills with patients, peers and other healthcare personnel

View the entire course listing (p. 85).

Semester 1		Credits
501-101	Medical Terminology	3
501-107	Digital Literacy for Health Care	2
513-116	Principles of Phlebotomy	3
	Credits	8
Semester 2		
513-147	Phlebotomy Practicum	4
809-198	Introduction to Psychology	3
801-198	Speech	3
	Credits	10
	Total Credits	18

## General Education Courses Within Program

Code	Title	Credits
801-198	Speech	3
809-198	Introduction to Psychology	3

## Truck Driving

*Short-Term Technical Diploma*  
30-458-1

There is a strong demand for professional truck drivers, and this program can help students prepare for an exciting career on the road. Professional Truck Drivers are responsible for the safe, efficient delivery of goods between locations. In this program, students will spend many hours behind the wheel learning how to maneuver trucks into tight

parking spaces, through narrow alleys and up to loading platforms. Students develop backing and driving skills through classroom, lab, range and roadway experiences. Students also examine the necessary communication with fellow drivers, dispatchers, shippers, mechanics and law enforcement personnel. In addition, students learn how to complete the necessary paperwork and appropriate inspections. As a result of this program, students will have the skills needed to earn your Class A commercial driver's license (CDL) and start a career as a Professional Truck Driver.

## Program Outcomes

- Drive a commercial vehicle safely.
- Inspect the vehicle to ensure safety of operation.
- Demonstrate knowledge of the laws and regulations pertaining to the operation of a commercial vehicle in the United States.
- Complete appropriate paperwork correctly.
- Demonstrate ability to plan trips and routes including managing loads and weight distribution.
- Communicate effectively with peers, customers and supervisors.
- Obtain a commercial driver's license.
- Demonstrate knowledge of securing a commercial vehicle.
- Demonstrate proper safety and wellness behaviors expected by employers and the industry.

## Graduates Have Found Employment As:

- Company Driver/Owner Operator
- Driver Manager
- Driver Mentor
- Local/Regional/Long Distance Driver
- LTL/Truckload Carriers
- Recruiting Specialist

Semester 1		Credits
458-100	Commercial Drivers License Tng	1
458-300	Truck Driving Semi-Level 1	4
458-301	Truck Driving Semi-Level 2	4
458-302	Truck Driving Semi-Level 3	4
Credits		13
Total Credits		13

## Welding

*One-Year Technical Diploma*  
31-442-1

Welding is the most common way of permanently joining metal parts. Heat is applied to the pieces to be joined, melting and fusing them to form a permanent bond. Because of its strength, welding is used to construct and repair parts of ships, automobiles, spacecraft, and thousands of other manufactured products. Welding is used to join beams and steel reinforcing rods when constructing buildings, bridges, and other structures, and also in utilities such as nuclear power plants.

Graduates of the program will be experienced to welding structural steel, aluminum, stainless steel and other metals. They will develop the ability

of blueprint reading, sketching, and layout for welding. Major job skills learned will include: Oxygen-Fuel Cutting (OFC), Plasma Arc Cutting (PAC), Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux Core Arc Welding (FCAW), Metal Core Arc Welding (MCAW), and Gas Tungsten Arc Welding (GTAW).

## Program Outcomes

- Demonstrate industry-recognized safety practices
- Interpret welding drawings
- Produce Gas Metal Arc Welds (GMAW)
- Produce shielded metal arc welds (SMAW)
- Produce flux core welds
- Produce gas tungsten arc welds (GTAW)
- Perform cutting operations

View the entire course listing (p. 85).

Semester 1		Credits
442-109	Mechanics of Learning for Welding	1
442-141	Welding Shop Safety	1
442-142	Introduction to Welding	1
442-143	Shielded Metal Arc Welding 1	1
442-144	Shielded Metal Arc Welding 2	1
442-145	Shielded Metal Arc Welding 3	1
442-146	Shielded Metal Arc Welding 4	1
442-147	Shielded Metal Arc Welding 5	1
442-148	Flux Cored Arc Welding 1	1
442-153	Welding Blueprint Reading 1	1
442-149	Flux Cored Arc Welding 2	1
442-150	Flux Cored Arc Welding 3	1
442-151	Flux Cored Arc Welding 4	1
442-152	Flux Cored Arc Welding 5	1
442-154	Thermal Cutting	1
804-306	Shop Mathematics I	2
Credits		17

Semester 2		Credits
442-155	Gas Metal Arc Welding 1	1
442-156	Gas Metal Arc Welding 2	1
442-157	Gas Metal Arc Welding 3	1
442-158	Gas Metal Arc Welding 4	1
442-159	Gas Metal Arc Welding 5	1
442-160	Gas Metal Arc Welding 6	1
442-161	Gas Tungsten Arc Welding 1	1
442-162	Gas Tungsten Arc Welding 2	1
442-163	Gas Tungsten Arc Welding 3	1
442-164	Gas Tungsten Arc Welding 4	1
442-165	Gas Tungsten Arc Welding 5	1
442-167	Advanced Welding Techniques	1
442-168	Welding Blueprint Reading 2	1
442-166	Welding Certification	1

801-311	Communication	2
	Credits	16
	Total Credits	33

### General Education Courses Within Program

Code	Title	Credits
801-311	Communication	2
804-306	Shop Mathematics I	2



# EMBEDDED TECHNICAL DIPLOMAS

In response to employer and student demand for additional educational opportunities, the Wisconsin Technical College System created embedded credentials within existing programs now referred to as Embedded Technical Diplomas. Embedded Technical Diplomas can be earned while taking courses within an already approved program. This opportunity provides students a set of industry recognized skills and abilities that will prepare them for entry level employment.

## Accounting Assistant

*One-Year Embedded Technical Diploma*  
31-101-1

The Accounting Assistant program will provide students with the skills necessary to perform entry-level bookkeeping and accounting functions for local employers. Accounting Assistants enter data into the accounting information system in order to prepare and process payroll, accounts payable, accounts receivable, and cash. The program serves as a solid foundation for further study in the accounting field and can be easily transferred into the two-year associate degree accounting program. The courses are designed for online, blended and traditional formats.

- Prepare financial statements and the related schedules in conformity with generally accepted accounting principles
- Apply accounting skills and principles creatively and innovatively in accordance with the standards of professional ethics
- Process financial transactions throughout the accounting cycle
- Analyze basic financial and business information to support planning and decision-making
- Perform payroll preparation, reporting, and analysis tasks

Semester 1		Credits
101-111	Accounting I	4
103-138	Word Documents	2
102-148	Introduction to Business and Management	3
804-134	Mathematical Reasoning	3
801-136	English Composition 1	3
Credits		15
Semester 2		Credits
101-112	Accounting II	4
101-130	Accounting Information Systems	3
101-135	Payroll Accounting	2
101-136	Computerized Accounting	2
103-107	Intermediate Excel	2
103-126	Introduction to QuickBooks	1
Credits		14
Total Credits		29

Do Not Use		Credits
801-136	English Composition 1	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
Credits		6
Total Credits		6

## Business Management Specialist

*One-Year Embedded Technical Diploma*

31-102-3

This Business Management Specialist technical diploma prepares you to apply the critical skills needed to plan, organize, staff, and lead day-to-day business management functions in an office or other type of business setting. This broad-based short term program offers a general background in foundations of business management. Courses completed in this program directly apply to the Associate of Applied Science degree in Business Management.

- Plan the operations of a business across functional areas.
- Organize resources to achieve the goals of the organization.
- Control business processes.

Semester 1		Credits
102-148	Introduction to Business and Management	3
103-128	Introduction to Microsoft Office Suites	2
104-102	Marketing Principles	3
801-136	English Composition 1	3
804-134 or 804-118	Mathematical Reasoning or Intermediate Algebra with Applications	3
Credits		14
Semester 2		Credits
101-111	Accounting I	4
102-109	Business Careers Planning and Communication	3
102-115	Management Principles	3
102-155	Introduction to Project Management	3
102-160	Business Law	3
Credits		16
Total Credits		30

## Entry Maintenance Technician

*One-Year Embedded Technical Diploma*

31-620-4

This embedded diploma is designed to prepare completers for entry-level electromechanical maintenance technician employment. Employment opportunities include the areas of electricity, hydraulics, pneumatics,

analog circuits, programmable logic controllers (PLCs), and computer and robotic programming. The diploma covers electromechanical safety, the fundamentals of DC and AC electricity, hydraulics, pneumatics, analog circuits, introduction to programmable logic controllers, computer and robotic programming, technical mathematics, and written communications.

## Flux Core Arc Welding

*Short-Term Embedded Technical Diploma*

30-442-6

Welding is the most common way of permanently joining metal parts. Heat is applied to the pieces to be joined, melting and fusing them to form a permanent bond. Because of its strength, welding is used to construct and repair parts of ships, automobiles, spacecraft, and thousands of other manufactured products. Welding is used to join beams and steel reinforcing rods when constructing buildings, bridges, and other structures, and also in utilities such as nuclear power plants.

Graduates of the program will gain experience in the Flux Core Arc Welding process. They will develop the ability of blueprint reading, sketching, and layout for welding. Major job skills learned will include: Flux Core Arc Welding (FCAW)

Semester 1		Credits
442-141	Welding Shop Safety	1
442-142	Introduction to Welding	1
442-153	Welding Blueprint Reading 1	1
442-148	Flux Cored Arc Welding 1	1
442-149	Flux Cored Arc Welding 2	1
442-150	Flux Cored Arc Welding 3	1
442-151	Flux Cored Arc Welding 4	1
442-152	Flux Cored Arc Welding 5	1
442-154	Thermal Cutting	1
442-168	Welding Blueprint Reading 2	1
	Credits	10
	Total Credits	10

## Gas Metal Arc Welding

*Short-Term Embedded Technical Diploma*

30-442-5

Welding is the most common way of permanently joining metal parts. Heat is applied to the pieces to be joined, melting and fusing them to form a permanent bond. Because of its strength, welding is used to construct and repair parts of ships, automobiles, spacecraft, and thousands of other manufactured products. Welding is used to join beams and steel reinforcing rods when constructing buildings, bridges, and other structures, and also in utilities such as nuclear power plants.

Graduates of the program will gain experience in the Gas Metal Arc Welding process. They will develop the ability of blueprint reading, sketching, and layout for welding. Major job skills learned will include: Gas Metal Arc Welding (GMAW)

Semester 1		Credits
442-141	Welding Shop Safety	1
442-142	Introduction to Welding	1
442-153	Welding Blueprint Reading 1	1
442-155	Gas Metal Arc Welding 1	1
442-156	Gas Metal Arc Welding 2	1
442-157	Gas Metal Arc Welding 3	1
442-158	Gas Metal Arc Welding 4	1
442-159	Gas Metal Arc Welding 5	1
442-160	Gas Metal Arc Welding 6	1
442-154	Thermal Cutting	1
442-168	Welding Blueprint Reading 2	1
	Credits	11
	Total Credits	11

## Gas Tungsten Arc Welding

*Short-Term Embedded Technical Diploma*

30-442-7

Welding is the most common way of permanently joining metal parts. Heat is applied to the pieces to be joined, melting and fusing them to form a permanent bond. Because of its strength, welding is used to construct and repair parts of ships, automobiles, spacecraft, and thousands of other manufactured products. Welding is used to join beams and steel reinforcing rods when constructing buildings, bridges, and other structures, and also in utilities such as nuclear power plants.

Graduates of the program will be experienced in the Gas Tungsten Arc Welding process. They will develop the ability of blueprint reading, sketching, and layout for welding. Major job skills learned will include: Gas Tungsten Arc Welding (GTAW).

Semester 1		Credits
442-141	Welding Shop Safety	1
442-142	Introduction to Welding	1
442-153	Welding Blueprint Reading 1	1
442-161	Gas Tungsten Arc Welding 1	1
442-162	Gas Tungsten Arc Welding 2	1
442-163	Gas Tungsten Arc Welding 3	1
442-164	Gas Tungsten Arc Welding 4	1
442-165	Gas Tungsten Arc Welding 5	1
442-154	Thermal Cutting	1
442-168	Welding Blueprint Reading 2	1
	Credits	10
	Total Credits	10

## Residential HVAC

*One-Year Embedded Technical Diploma*

31-601-1

This embedded diploma is designed to prepare completers for entry-level employment in the area of residential heating, ventilation, and air

conditioning (HVAC) employment. The diploma covers print reading and code, air conditioning fundamentals, refrigeration fundamentals, electrical fundamentals, computerized HVAC and refrigeration design, heating systems, motors and motor controls, air conditioning and refrigeration piping, charging methods, customer service essentials, trade mathematics, and communications.

Pathway Certificates and Embedded Technical Diplomas are part of a larger model of BTC's Career Pathways that link related academic programs in sequence. Each program offers direct job preparation and a path to the next level of academic programming.

#### Service HVAC/R Systems

#### Troubleshoot HVAC/R Systems

#### Evaluate HVAC/R System Design

Semester 1		Credits
804-306	Shop Mathematics I	2
601-116	A/C Safety, Tools, Thermal Dynamics and HVAC Terminology	1
601-117	A/C Components, Refrigeration Cycle and Refrigeration Gauges	1
601-118	Air Flow Fundamentals	1
601-121	Electrical Safety, Meter Usage and Ohm's Law	1
601-122	Parallel Circuits, Combination Circuits and Capacitors	1
601-123	Electrical Services, Wire Sizing and Electrical Diagrams	1
601-128	Print Reading for HVAC/R	1
601-129	Mechanical Code	1
601-131	Access Valves, Compressors and Condensers	1
601-132	Evaporators, Metering Devices and Accessories	1
601-133	Heat Transfer Principles and Manual J	1
601-134	Wrightsoft Load Calculations and RESCheck	1
Credits		14
Semester 2		Credits
601-136	Split Phase Motor Identification, Testing and Replacement	1
601-137	Variable Speed Motors, Current Relays, Potential Relays and PTC Relays	1
601-138	Transformers, Contactors, Relays and Motor Starters	1
601-141	Gas Pipe Sizing, Gas Regulators and Gas Valves	1
601-142	Residential Gas Furnaces	1
601-143	Electric Heat and Air-to-Air Residential Heat Pump Systems	1

601-146	Flaring, Swagging and Soldering Copper Pipe	1
601-147	Air Acetylene and Oxy-Acetylene Brazing Copper Pipe	1
601-148	Refrigeration Recovery, Deep Evacuation and Charging of Residential, Light Commercial, Geothermal and Ice Machine Equipment	1
601-149	Refrigeration Recovery, Triple Evacuation and Charging of Heat Pumps and Refrigeration Equipment and EPA Test	1
462-322	Human Relations in the Industrial Setting	2
Credits		12
Total Credits		26

## Shielded Metal Arc Welding

### Short-Term Embedded Technical Diploma

#### 30-442-4

Welding is the most common way of permanently joining metal parts. Heat is applied to the pieces to be joined, melting and fusing them to form a permanent bond. Because of its strength, welding is used to construct and repair parts of ships, automobiles, spacecraft, and thousands of other manufactured products. Welding is used to join beams and steel reinforcing rods when constructing buildings, bridges, and other structures, and also in utilities such as nuclear power plants.

Graduates of the program will gain experience in the Shielded Metal Arc Welding process. They will develop the ability of blueprint reading, sketching, and layout for welding. Major job skills learned will include: Shielded Metal Arc Welding (SMAW)

Semester 1		Credits
442-141	Welding Shop Safety	1
442-142	Introduction to Welding	1
442-153	Welding Blueprint Reading 1	1
442-143	Shielded Metal Arc Welding 1	1
442-144	Shielded Metal Arc Welding 2	1
442-145	Shielded Metal Arc Welding 3	1
442-146	Shielded Metal Arc Welding 4	1
442-147	Shielded Metal Arc Welding 5	1
442-154	Thermal Cutting	1
442-168	Welding Blueprint Reading 2	1
Credits		10
Total Credits		10

## Substance Abuse Education

### One-Year Embedded Technical Diploma

#### 31-550-1

This program prepares individuals to help prevent substance abuse, counsel individuals and families with drug and alcohol problems, and perform intervention and therapeutic services for persons suffering from addiction. Includes instruction in individual and group counseling skills, psychology of addiction, substance abuse identification methodologies, substance abuse treatment modalities, substance abuse prevention and treatment resources, psychopharmacology, treatment evaluation, patient education, and professional standards and ethics.

Clinically evaluate for substance use disorders and treatment needs

Develop treatment plans

Facilitate referral to meet needs

Demonstrate service coordination skills

Demonstrate counseling skills with individuals, groups and families

Provide education relevant to substance use

Maintain clinical records according to agency, federal and state guidelines

Adhere to accepted culturally competent, ethical and behavioral conduct

<b>Semester 1</b>		<b>Credits</b>
520-105	Intro to Addiction and Substance Abuse Disorders	3
520-106	Professional Practices in Human Services	3
520-109	Group Facilitation	3
520-113	Rehabilitation Services	3
Credits		12
<b>Semester 2</b>		
550-100	Substance Use Assessment, Diagnosis & Treatment	3
550-115	Understanding Addiction	3
550-119	Substance Use Disorder Counseling	3
550-120	Psychopharmacology	3
Credits		12
Total Credits		24

## CERTIFICATES

Local certificate programs include a grouping of only those courses which are essential to prepare a student for successful employment in specific occupations in our region. These internal certificates are specific to Blackhawk Technical College, are not listed on a transcript, and may be issued based on completion by the department that has responsibility for the program.

Advanced Technical Certificates are awarded and listed on a student's transcript, however, students must submit a graduation application to be reviewed and awarded.

### Computed Tomography

*Advanced Technical Certificate*  
98-526-1

Completion of the Computed Tomography Certificate provides the radiographer with the knowledge and clinical skills to specialize in the advanced imaging modality of computed tomography. This certificate consists of academic and clinical courses designed to meet the eligibility requirements for the certification examination in Computed Tomography administered by the American Registry of Radiologic Technologists (ARRT).

#### Certificate Outcomes

- Perform high-quality computed tomography examinations.
- Critically evaluate image quality.
- Practice radiation safety principles.
- Provide quality patient care and evaluation.
- Model professional and ethical behavior consistent with the A.A.R.T. Code of Ethics.
- Apply critical thinking and problem solving skills in the practice of computed tomography.

Semester 1		Credits
526-150	Computed Tomography Sectional Anatomy and Pathology	3
526-151	Computed Tomography Procedures	3
	Credits	6
Semester 2		
526-152	CT Physics and Instrumentation	3
526-153	Computed Tomography Clinical	2
	Credits	5
	Total Credits	11

### Human Resource Generalist

*Certificate*  
99-920-3

Completion of the Human Resource Generalist Certificate will prepare you for a supporting role in Human Resources. Through your studies, you will obtain knowledge and practical skills for career enhancement and job advancement in the field of Human Resources. You may apply these courses to the Human Resources Associate Degree.

### Certificate Outcomes

- Recruit and interview qualified candidates for available positions.
- Organize health and safety programs.
- Coordinate employee training and education.
- Interpret employment law in order to assist managers and supervisors.
- Assist HR managers in larger organizations.

View the entire course listing (p. 85).

Code	Title	Credits
116-102	Training and Development	3
116-116	Staffing Organizations	3
116-119	Labor Relations	3
196-103	Employment Law	3
196-108	Health, Safety and Security	3
196-168	Organizational Development	3
196-193	Human Resource Management	3
Total Credits		21

### Law Enforcement - Basic Jail Academy

The Basic Corrections Academy is a program that provides the curriculum required for correctional officer certification with the Wisconsin Department of Justice, Law Enforcement Standards Board. The program is a 200-hour course that focuses on the philosophical and tactical principles of working as a correctional officer in Wisconsin. The course includes a skills-assessment examination prior to completion to verify student competence. Upon the completion of the program, a student will be eligible for certification with the Wisconsin Department of Justice, Law Enforcement Training and Standards Board.

### Patient Service Specialist

*Local Certificate*

Completion of the *Patient Service Specialist* Certificate prepares students to perform medical support duties using specific knowledge of medical terminology, customer service, and technology within a hospital, clinic, or laboratory. Duties may include scheduling appointments, billing patients, and compiling and recording medical charts, reports, and correspondence as well as schedule and confirm patient diagnostic appointments, surgeries, or medical consultations. You may apply these courses towards a Technical Degree in *Medical Assistant* or *Phlebotomy*.

10-501-101 Medical Terminology (3 credits)

10-501-107 Digital Literacy for Healthcare/Intro to Healthcare Computing (2 credits)

10-501-104 Culture of Healthcare (2 credits)

Total credits: 7

This certificate prepares individuals, under the supervision of office managers, nurses, or physicians, to provide customer service, visitor reception, and patient intake and discharge services. Includes instruction in medical office and healthcare facility procedures, medical terminology, interpersonal communication and customer service skills in a healthcare

setting, principles of health care operations, use of business technology applications for documentation, record-keeping and using an electronic health record, and patient privacy and confidentiality issues as they relate to healthcare.

## Project Management

*Certificate*  
99-913-3

The Project Management Certificate focuses on the essential skills and knowledge needed to promote effective project leadership and management from inception to completion. This certificate is designed for the individual seeking career advancement or professional development. Three of the four courses can be applied to an Associate Degree in Marketing.

### Certificate Outcomes

- Apply project management processes
- Apply project leadership skills
- Develop project plans and status reports
- Apply scheduling/cost management skills
- Develop proficiency in Microsoft Project software
- Lead a real life project in a lab setting

View the entire course listing (p. 85).

Code	Title	Credits
102-155	Introduction to Project Management	3
102-157	Managing Projects	2
196-154	Leadership 1	1
196-161	Teambuilding and Communication 1	1
196-159	Essentials of Quality 3	1
182-105	Negotiations	1
102-158	Project Management Capstone	3
Total Credits		12

## Secure Juvenile Detention Academy

The Secure Juvenile Detention Academy is a program that provides the curriculum required for juvenile detention worker certification with the Wisconsin Department of Justice, Law Enforcement Training and Standards Bureau. The program is a 160 hours and provides instruction on how to be a detention officer. The program requires a skills-assessment prior to completion to verify student competence. Upon the completion of the program, a student will be eligible for certification with the Wisconsin Department of Justice as a secure juvenile detention worker.

## Supply Chain Management Certificate

*Certificate*  
99-182-1

The Supply Chain Management Certificate Program focuses on developing essential skills and knowledge in the areas of purchasing, inventory management, and logistics type careers and professional effectiveness in project management and negotiations. This certificate

is designed for the individual seeking exposure, advancement or professional development in the understanding of core supply chain functions. All courses will apply towards the Associate of Applied Science degree in Supply Chain Management.

### Outcomes:

Upon successful completion of this certificate, students will be able to:

- Define supply chain concepts and understand the flow of materials, information and money.
- Demonstrate their ability to plan for, purchase and manage inventories and identify its impact on organizations.
- Develop negotiation abilities and their capacity to understand and predict behaviors in competitive situations.
- Evaluate supply chain costs and the profitability that stems from effective management practices.
- Apply continuous improvement strategies to all aspects of supply chain management.

Course	Title	Credits
<b>Semester 1</b>		
182-103	Introduction to Supply Chain Management	3
182-104	Inventory Management	3
182-106	Purchasing	3
182-107	Distribution & Logistics	3
102-155	Introduction to Project Management	3
182-105	Negotiations	1
102-134	Lean Six Sigma	3
Credits		19
Total Credits		19



# GENERAL EDUCATION

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The General Education and Academic Support Division lays the foundation for broad-based student learning. The division strives to meet students at whatever point of readiness they are when admitted to BTC. In some cases, students are prepared and ready to enroll immediately in general education classes. In other instances, students may need additional instruction to reinforce skills necessary to achieve their academic goals.

General Education courses help students develop core knowledge, skills, and attitudes essential for personal and professional success. General Education courses (<https://www.blackhawk.edu/Programs-Classes/Take-a-Class/Class-Search/credit/>) in communication, social science, math, and natural science are based on an applied, integrated curriculum and use classroom activities that reflect real world work situations relevant to program areas while also preparing students to be lifelong learners.

# BASIC SKILLS EDUCATION

## Basic Skills-Academic Support

Blackhawk provides basic skills education, GED/HSED instruction, classes for English Language Learners (ELL), and support services to help students succeed in post-secondary education. Staff work closely with other divisions of Blackhawk as well as with local schools and industries to develop programs to meet educational needs in the community. Classes are offered at a variety of locations throughout Rock and Green Counties.

There is an array of services in response to students' unique circumstances, abilities and goals. Support is provided via classroom instruction, workshops, computer-based tutorials, and individualized assistance through learning labs. Our instructional staff are sensitive to the concerns of adult students who desire to complete or continue their education.

A pre-assessment of academic needs (TABE) is required. Minimal material fees may apply. Feel free to contact us for more information:

### Central Campus/Rock County

6004 S. Cty Rd G  
Janesville, WI 53546-9548  
(608) 757-7666

### Monroe Campus/Green County

210 4th Ave.  
Monroe, WI 53566-1033  
(608) 328-8204

## High School Contracting

This is a cooperative effort to provide educational alternatives to at-risk students and to comply with the compulsory school attendance laws. It offers high school credit and GED/HSED courses for students referred by and enrolled in district high schools. This program aids public schools by providing in-school youth with a chance to make up or add on credits.

## Learning Labs

There are two learning labs at Central Campus: the Writing and Communication Lab and the Math and Science Lab. These two labs allow students to study at their own pace to prepare to take GED/HSED tests, enter post-secondary programs, or seek supplemental instruction to assist them with coursework.

Some services, such as tutorial assistance are available on a walk-in basis. Other services, such as individualized instruction, require some type of advance arrangement. Students are encouraged to stop in during lab hours to explore the opportunities the Learning Labs provide.

The Learning Labs are located in the Student Success Center at Central Campus. The Writing and Communication Lab is in room 2213. The Math and Science Lab is located in room 2216. If students have questions, they should call (608) 757-7676.

## RECAP Project

The Rock County Education and Criminal Addictions Program (RECAP) is a cooperative program among Blackhawk Technical College, Rock

County Sheriff's Office, and CESA #2. The program provides Adult Basic Education (ABE) and GED/HSED instruction, Cognitive Interventions Program (CGIP), drug and alcohol counseling, job readiness, and work experience.

## GED-General Education Development Certificate

### Preparation

GED preparation (<https://www.blackhawk.edu/Programs-Classes/GED-HSED/GED-HSED-Preparation/>) (more formally known as General Education Development) is open to all adults. GED classes are offered at Blackhawk's Central Campus, Monroe campus as well other community sites.

There are structured classes, as well as individualized study options available to students to best meet their needs. GED classes (p. 252) are provided at no cost to students, although some sites may charge minimal material fees. For additional information, contact (608) 757-7741.

## General Education Development (GED) Testing Service® – A Program of the American Council on Education

Blackhawk Technical College is an official testing center for General Education Development (GED) Testing Service/Pearson Vue Testing. Testing is offered at the Central Campus, Monroe Campus, and the Rock County Jail. Students seeking to test must be at least 18 ½ years old, excluding students whose senior class has graduated or those under an approved high school contract. Orientation and testing schedules are available at [blackhawk.edu](http://blackhawk.edu) or from the Testing Center, located on Central Campus.

## General Education Development (GED) and High School Equivalency Diploma (HSED) Credentials

The GED/HSED test batteries measure high school-level knowledge and skills. The tests are designed to measure the academic outcomes normally acquired by completing a typical high school program of study. The GED test battery consists of four (4) tests: Language Arts (this contains an essay portion), Mathematics, Science, and Social Studies. The HSED credential is earned by completing the four (4) GED tests and three (3) additional competencies: Health and Civic Literacy, and Employability Skills. All students are required to complete a career assessment. Blackhawk Technical College offers classes to prepare for the GED/HSED test batteries throughout the Blackhawk Technical College District. Classes are flexible and can often be taken during the day or evening.

## GED / HSED Completion Ceremony

Individuals who have earned either the GED or HSED credential have an opportunity to participate in a completion ceremony. This ceremony is held once a year. Family and friends are welcome to attend and celebrate this accomplishment.

## HSED

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### HSED-High School Equivalency Diploma

HSED programming (<https://www.blackhawk.edu/Programs-Classes/GED-HSED/>) (more formally known as High School Equivalency Diploma) is open to all adult students over 18 seeking a high school credential. HSED classes are offered at BTC's Beloit Center, central campus, and Monroe campus as well as at the Rock County Job Center and other community sites.

A High School Equivalency Diploma fulfills the high school diploma requirement for most jobs. An HSED is issued by the state through BTC and is acquired by successfully completing four exams, plus three external components (Health, Civics, Employability). The HSED option is an attractive alternative for those non-high school graduates who have little or no high school credit accumulated. The minimum age to begin work on an HSED is 18.

Classes for HSED preparation are provided at no cost to students although some sites may charge minimal materials fees. For more information, contact (608) 757-7741.

## ELL

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### ELL-English Language Learning

English Language Learner (<https://www.blackhawk.edu/Student-Resources/Academic-Support-Tutoring/English-Language-Learners/>) (ELL) classes provide basic skills education instruction in speaking, listening, reading and writing for adults whose native language is not English. The emphasis is on learning the English language to be able to successfully interact with others whether for employment, community involvement, or for furthering education.

For additional information, contact (608) 757-7741.

# APPRENTICE PROGRAMS

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The apprenticeship process is a formal arrangement involving employers, apprenticeship committees, state government, technical colleges, and individuals who want to learn a skilled craft through on-the-job training and applied classroom instruction in their chosen trade. Paid Related Instruction is a key part of each apprenticeship and is required by the Wisconsin apprenticeship law. The length of training may vary from two to five years, depending on the trade. Apprentices who successfully complete the prescribed number of hours of training become certified skilled workers.

Blackhawk Technical College currently offers the following:

- 50-413-1 Industrial Electrician Apprentice
- 50-413-2 Electricity (Construction) Apprentice
- 50-413-9 Electrician Apprentice (ABC)
- 50-464-1 Maintenance Technician Apprentice
- 50-620-1 Mechatronics Apprentice

To become an apprentice, students first need to get hired by an employer in one of the fields listed above, followed by an application process and state approval by the employer. Many individuals, including women and minorities, have discovered that apprenticeship training offers an opportunity for a good-paying career.

Further information and a list of Wisconsin apprenticeships can be obtained online at <http://www.dwd.wisconsin.gov/apprenticeship/individuals.htm> or by calling (608) 266-3332. For information on BTC's apprenticeship programs or the apprenticeship process (<https://www.blackhawk.edu/Professional-Training/Apprenticeships/>), please contact (608) 757-7628.

## PROFESSIONAL AND CONTINUING EDUCATION

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We offer many courses for a variety of occupations through continuing education. Explore the variety of non-credit vocational courses designed for upgrading skills or personal development.

### Upgrade Your Skills

Enhance your skills or jumpstart a new career by acquiring the skills and knowledge needed to excel on the job. Continuing education classes offer an affordable option for exploring new areas of interest, obtaining a specific certification or fulfilling a continuing education requirement. Some of the areas these classes serve are in management, leadership development or computer literacy. We provide this training using industry veterans who know the field.

### Career Preparation

You also may want to explore or prepare for a new career. We have classes in Microsoft® Office applications, electricity, safety standards and many others. Short-term trainings last from one to 10 weeks and are valuable in preparing for and deciding on a new career.

### Anytime Classes

Through our partnership with ed2go (<http://www.ed2go.com/blackhawktech/>), you may take online, non-credit courses that will provide both skill and enjoyment. Our partnership with ed2go gives you a choice of classes, including computer applications, law, personal development, technology, teaching and publishing. See for yourself at <http://ed2go.com/blackhawktech> (<http://ed2go.com/blackhawktech/>)

### Community Education

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Blackhawk Technical College has classes just for you. No grades, no pressure – just fun and purpose in learning. We offer non-credit classes at the Central Campus, Advanced Manufacturing Training Center and Monroe Campus. Pick a class, a location and get started right away. There are many classes for beginners, so if you have never used a computer or spoken a word of Spanish, we have a seat for you.

### More Anytime Classes

Save gas and time by looking into our online non-credit courses that will provide both skill and enjoyment. Our partnership with ed2go gives you a choice of classes, including computer applications, law, personal development, technology, teaching and publishing. See for yourself at <http://www.ed2go.com/blackhawktech/>.

### CPR and First Aid

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#### Healthcare Provider CPR

For any medical staff personnel, medical type students, EMT's, nursing students, and nursing personnel. The course consists of airway obstruction and CPR, two person CPR, using adjunct equipment for infants, children, and adults based on the newest American Heart Association techniques. (OSHA approved)

#### Healthcare Provider CPR Refresher

Bi-annual update for those already certified in CPR.

#### Heartsaver AED CPR

CPR is an emergency procedure designed to restore life after sudden unexpected death has occurred. This basic life support training includes recognition of the early warning signs of heart attack and proper response to these symptoms. When certified you will be able to recognize respiratory arrest and perform cardiopulmonary resuscitation. CPR involves a combination of ventilation techniques and chest compressions. Proficiency in CPR requires mannequin practice supervised by certified instructors. A bi-annual refresher class is necessary to maintain CPR skills.

#### Heartsaver AED First Aid

Basic First Aid for the general public, business and industrial personnel. The course consists of the principles and techniques for aiding the victim until more qualified help arrives. Course also includes CPR and AED training.

Search First Aid & CPR classes. (<https://www.blackhawk.edu/Programs-Classes/Take-a-Class/Class-Search/non-credit/>)

### Workforce and Community Development

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#### Workforce Training, Economic Development, and Outreach to Our Communities

Each year thousands of Green and Rock County incumbent workers, job seekers and adult learners look to Blackhawk Technical College to fill their training and educational needs. (<https://www.blackhawk.edu/Professional-Training/Workforce-Training/>) Whether you come as an individual, business or community organization you can participate in learning programs in Beloit, Janesville, Milton or Monroe, at one of BTC's learning centers, or at your place of business.

Workforce and Community Development (WCD) provides business and professional development seminars and workshops, (<https://www.blackhawk.edu/Professional-Training/Workforce-Training/Seminars-Workshops-Boot-Camps/>) customized training services (<https://www.blackhawk.edu/Professional-Training/Workforce-Training/Customized-Training/>), (<http://www.blackhawk.edu/ExplorePrograms/BusinessandCommunityDevelopment/Seminars.aspx>) continuing education opportunities (<https://www.blackhawk.edu/Programs-Classes/Take-a-Class/Class-Search/non-credit/>) and an array of short-term courses in a variety of settings. This area also schedules learning opportunities for individuals seeking enrichment or furthering their knowledge and skills for work or fun. WCD staff work directly with business, government, education, community organizations, public services, and others to provide customized training and consulting services that can include onsite or on-campus training.

Customized training and business consulting is the core of the services provided by WCD. Our professional staff assesses your business and training needs and then designs and delivers services to help your business or organization meet its goals. Business seminars, organizational analyses, employee skills assessments, business planning assistance and facilitation services are also available.

A dedicated manager will match the right trainer or consultant to your organization's needs and assist in creating solutions to address your specific issues by customizing curriculum and activities. Our manager can also guide you to funding assistance resources that may be available to help offset your training investment.

Our clients include individuals, businesses and organizations from the following sectors:

- Manufacturing
- Transportation and Distribution
- Construction and Skilled Trades
- Community Based Residential Facilities
- Community Organizations
- Education
- Health Care
- Finance and Accounting
- Real Estate
- Insurance

Emerging technologies. Technical skill development. Quality, safety and sustainable practices. Blackhawk has designed hundreds of engaging training programs for individuals and professional teams that cover a wide array of topics. We also teach students the marketable "soft skills" today's employers are looking for. Some of our most popular programs include:

- Leadership & Team Principles
- Safety Expertise
- Organizational Development
- Business Communications
- Microsoft Office
- Quality Production

## **Training and Consulting Services**

Interested in learning more about BTC's customizable training workshops? Contact us at (608) 757-7623 or [businessdevelopment@blackhawk.edu](mailto:businessdevelopment@blackhawk.edu).



## COURSE DESCRIPTIONS

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Each link within this section offers a list of classes available within a specific field. Information includes a general summary of the subject matter; which semester a class is available; the days and times of classes; and if pre-requisites or co-requisites are required.

# ALL DESCRIPTIONS

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to  
Academic Programs (p. 22).

## Accounting (101)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to  
Academic Programs (p. 22).

### 101-102 Office Accounting

**Credits:** 3

Office Accounting is a basic course in accounting principles and bookkeeping procedures. Topics include journalizing and posting transactions, preparing worksheets, adjusting and closing entries, and preparing the financial statements. Emphasis is on the service enterprise and accounting for cash.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

### 101-105 Accounting Spreadsheets

**Credits:** 3

This course provides hands-on experience in reporting financial data utilizing a popular spreadsheeting program. The course focuses on the application of spreadsheeting software in the Accounting profession. A working knowledge of Microsoft Windows and a basic knowledge of the accounting cycle are recommended.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** 101-111

Complete Course Listing

### 101-109 Corporate Accounting II

**Credits:** 3

This is a continuation of Corporate Accounting I. This is a capstone course for fourth semester accounting students that offers a simulated work experience for a career in the accounting profession. Topics include an advanced study and preparation of corporate financial statements, corporate financial statement analysis, budgeting/forecasting, and an in-depth study of a Fortune 500 company.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (101-125) and (101-113)

Complete Course Listing

### 101-111 Accounting I

**Credits:** 4

This is an introductory course to the basic structure of accounting. Fundamental accounting concepts and principles are presented with their application to the analysis and recording of business transactions through the use of problems and a practice set. The course focus is on journalizing, posting, preparing financial statements, accounting for merchandisers, purchases, and banking transactions. A working knowledge of Microsoft Office is highly recommended.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Writing Skills, 070 or ACT English, 18 or ASSET Writing Skills, 44 or AccuPlacer Sentence Skills, 083 or Test Waived-College Degree or 831-103 or 831-103) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or 838-104 or 838-104) and (COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or ASSET Numerical Skills, 40 or Test Waived-College Degree or 834-109 or 834-109) or (AccuPlacer Arithmetic, 089 or AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030) or (Next Gen AccuPlacer Arithmetic, 272) or (Next Gen AccuPlacer Arithmetic, 257 and Next Gen AccuPlacer QRAS, 210)

Complete Course Listing

### 101-112 Accounting II

**Credits:** 4

Accounting II is a continuation of Accounting I. Account groups are studied for their composition, valuation, recognition, and appropriate accounting treatment. The accounting groups focused on are: receivables, inventory, fixed assets, and current liabilities. In addition, managerial/cost accounting concepts and principles, and cost-volume-profit analysis are introduced.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (101-111) and (804-123 or 804-134 or 804-118)

Complete Course Listing

### 101-113 Corporate Accounting

**Credits:** 4

This course focuses on accounting for corporations. Topics include International Financial Reporting Standards, Sarbanes-Oxley, corporate financial statements, corporate investments, Statement of Cash Flows, debt and equity financing, capital budgeting, and a unit on partnerships. A comprehensive practice set allows students a practical application of accounting theories.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** 101-112

Complete Course Listing

### 101-117 Accounting Fundamentals

**Credits:** 3

This course is an introduction to accounting from a non-accountant's perspective. Learning objectives emphasize general accounting terminology and concepts, the effects of transactions on financial statements, the relationships between financial statements, and the interpretation of financial statement information using an analytical approach.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (804-123 or 804-118)

Complete Course Listing

**101-123 Income Tax Accounting****Credits: 4**

Federal and state income tax laws are covered as related to the individual taxpayer. Emphasis is on learning to research and interpret tax laws and regulations. The student will study the law, then apply the law to illustrative cases and prepare appropriate tax forms.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-112)

Complete Course Listing

**101-124 Applied Income Tax****Credits: 2**

This course provides hands-on experience in preparing individual federal and state income tax returns for people in the community through the VITA program. Customer relations are an important component of this course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 101-123

Complete Course Listing

**101-125 Cost Accounting****Credits: 4**

This course focuses on the study of cost accounting, blending theory with practical application of problems and case studies. Cost systems presented include the job order cost system and the process cost system. Emphasis is on cost accumulation using actual and standard costing, as well as managerial cost decision making.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-112) and (101-135)

Complete Course Listing

**101-128 Supervised Occupational Experience - Accounting****Credits: 3**

In this course, second-year students interview for accounting work-based learning placements within business and industry. Once selected, students will apply their knowledge and skills in an accounting work environment under the supervision of an employer.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-112) and (101-130) and (101-135) and (101-136)

Complete Course Listing

**101-130 Accounting Information Systems****Credits: 3**

This course helps students develop their professional judgment as accountants while studying the flow of information in an organization. Using scenarios, each transaction cycle is analyzed and studied for internal control weaknesses. Based on the analysis, the students are required to identify ways to strengthen any weakness identified. Students will learn flowcharting techniques and principles of system design.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 101-111

Complete Course Listing

**101-131 Accounting Databases****Credits: 2**

This course covers the development of a REA model of a business. The students learn Microsoft Access and then are divided into teams to develop an accounting information system using Access. The system is documented stressing the use of good internal controls. Emphasis is on teamwork and good design techniques. A working knowledge of Microsoft Windows is expected.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-130)**Co-requisites:** (101-109)

Complete Course Listing

**101-134 Accounting Internship****Credits: 2**

In this course, second-year students interview for accounting work-based learning placements within business and industry. Once selected, students will apply their knowledge and skills in an accounting work environment under the supervision of an employer.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-112) and (101-130) and (101-135) and (101-136)

Complete Course Listing

**101-135 Payroll Accounting****Credits: 2**

This course emphasizes methods of computing wages and salaries, methods for keeping payroll records and the preparation of government reports. Included is a project requiring the student to record all the payroll information for a business during a three-month operating period.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-111) and (804-123 or 804-134 or 804-118)

Complete Course Listing

**101-136 Computerized Accounting****Credits: 2**

This course is designed to build the bridge between a manual accounting system and a computerized system, explaining the "behind-the-scenes" actions of the computerized system. A popular computerized accounting software package is used to record business transactions within a computerized system and produce financial statements and various other reports for management. This course is designed to provide the user with an intermediate level of proficiency in a computerized accounting software package.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 101-111

Complete Course Listing

**101-137 Career Development in Accounting****Credits: 1**

This course prepares students to use strategies for seeking, obtaining, and retaining employment in accounting and finance related positions. Students develop a job search plan, prepare a resume and cover letter, complete application forms, and prepare for job interviews. Students build a professional profile and finalize a personal portfolio. This course is intended for students who are in their final semester of the two year degree.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**101-150 AIPB Certified Bookkeeper Review****Credits:** 3

This course is a preparatory course for the national American Institute of Professional Bookkeepers (AIPB) Certified Bookkeepers examination. Students will study adjusting entries, correction of accounting errors, payroll accounting, depreciation, inventory, and internal controls. Upon completion of this course, each student will have reviewed all six parts of the Certified Bookkeeper examination.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-111) and (101-112) and (101-135)

Complete Course Listing

## Agri-Business (006)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**006-101 Contemporary Issues in Sustainability****Credits:** 1

This course examines the role of agriculture and consumers in today's society. Emphasis will be placed on economically profitable, environmentally sound and socially responsible agricultural practices for farm and agribusiness operations.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-102 Emerging Agriculture Technologies****Credits:** 2

This course provides classroom and field experience to expose students to the latest developments in agricultural technology for agribusinesses applications. Emphasis will be geared toward providing students experience in technical problem-solving for agri-businesses and farm operations.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-103 Agricultural Commodity Marketing****Credits:** 1

Learners will develop an understanding of the principles of marketing relative to basic economic theory. We will examine the marketing process from production through delivery to the ultimate consumer including product differentiation, direct marketing, and competitive advantage.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-104 Special Topics in Agriculture****Credits:** 1

This course is an opportunity for participants to learn from professionals in the fields of agronomy, finance and livestock nutrition and management as well as from full-time crop, livestock and dairy producers. Learners will connect to professionals in the field of agricultural production and agribusiness. Students will be able to do this through linking with the Farm Business and Production Management Program from November through March.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-105 Nutrient Management****Credits:** 3

Students focus on profitable crop production methods using commercial products, nutrient credits, and rotational practices. Students learn how to interpret soil test reports, balance soil pH, meet nutrient requirements, and make product recommendations based upon economic, environmental, and legal criteria. Students will study field mapping based on global positioning systems and variable rate technology.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-106 Agribusiness Occupational Experience****Credits:** 1

The course is an opportunity for students to gain hands-on experience with agribusinesses within their area of interest or as career exploration. Participants will build a network of potential employers upon completion of the Agribusiness Specialist program.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-107 Pest Management:Applicator Training****Credits:** 3

Students will apply principles and methods used in the control of pests found in the production of agricultural commodities. Preparation for the Wisconsin Commercial Pesticide Applicator licensing will include: restricted use regulations, applicator safety, environmental safety, equipment calibration, and product label interpretation. Course topics also include: pesticide mode of action, interpretation of aerial photos, and integrated pest management (IPM).

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-108 Commercial Drivers Training****Credits:** 1

A Course designed to prepare students to take the Department of Transportation (DOT) General CDL examination as well as examinations that cover DOT endorsements for air brakes, hazardous materials, doubles and triples. A CDL is a very valuable certification for all types of agribusiness employment. Completion of these exams could lead to the student receiving their driving permit, which would allow them to drive a commercial truck with a licensed CDL driver in the passenger seat.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-116 Introduction to Soils****Credits:** 3

This course provides fundamental knowledge of soils and growth media. Course topics include soil formation and development, soil components, soil profile, soil classification, and soil conservation. Participants will experience soils concepts through the completion of hands-on activities.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-160 Introduction to Plant Science****Credits:** 3

This course provides fundamental knowledge of plant components and their functions. Topics include pollinating and propagating plants, germinating seeds, plant nutrients, and factors affecting photosynthesis, respiration, and transpiration. Participants will experience plant components and their functions through the completion of hands-on activities.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-162 Farm Records and Business Management****Credits:** 3

This course emphasizes the practical use of a record management system in managing a farm or agribusiness. Students will create business goals and analyze the use of credit as well as simulate business arrangements, estate planning, and preparing income taxes. Students will create balance sheets, cash flows and income statements as they create an overall financial analysis of the farm or agribusiness.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-163 Agribusiness Management****Credits:** 3

Topics studied in this course are agriculture agencies; records and accounts; sources of credit, insurance, enterprise budgeting, cash flow, net worth; and business organization. Students will learn about the organization and structure of agricultural businesses; resource evaluation, policy development and implementations, functions of management, and laws and taxes that affect business.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-164 Livestock Management****Credits:** 3

This course focuses on the various aspects of selection, breeding, herd health, raising of replacement stock, reproductive physiology, and marketing of livestock and livestock products. Students explore topics that affect livestock management such as the selection, operation, and maintenance of farm buildings, milking, feeding, and ventilation as well as manure handling equipment. Students will be able to analyze and prepare for a myriad of aspects that are included in the management of livestock.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (006-180)

Complete Course Listing

**006-165 Livestock Nutrition****Credits:** 3

This course emphasizes the skills, techniques and concepts necessary for sound feeding management. Students engage in the practice of calculating feed values and pricing, as well as consumption requirements for livestock. Students also investigate necessary information from feed tag labels and base feeds as they create simulated feeding programs for specific livestock with special attention given to the metabolic diseases of lactating animals. Through the use of basic ration balancing concepts, students will be able to create simple rations for specified livestock.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (006-180)

Complete Course Listing

**006-166 Precision Agriculture Technologies****Credits:** 3

This course provides an introductory overview of precision farming concepts and the tools of precision farming (GPS, GIS and VRT). Students will engage in the use of each of these tools within the processes of a precision farming system. Students will participate in several simulated hands-on activities using actual farm data to be able to properly use these tools in a real world agricultural setting.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (006-102)

Complete Course Listing

**006-169 Career Develop in Agriculture****Credits:** 2

This course is designed to assist students in developing career leadership skills for the agriculture industry. Units of study include: goal setting, strengths finder, career opportunities, employment preparation, industry issues, and the role of professional organizations in agriculture.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-180 Introduction to Animal Science****Credits:** 3

The course provides fundamental knowledge of the animal science field. Topics include animal health, animal environments, anatomy and physiology, genetics and reproductions, animal feedstuffs, and job related safety. Participants will experience animal concepts through the completion of hands-on activities.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**006-181 Crop Management****Credits:** 3

Students will be introduced to all phases of the management and economics of crop production. Students will explore and analyze specific topics related to variety, selection, planting, pest control, harvesting, storage, and marketing. Students will engage in project based learning by developing a crop management plan which focuses on crop enterprise analysis and the production of a cropping budget.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (006-160) and (006-107)

Complete Course Listing

**006-197 Agribusiness Internship****Credits:** 3

Students will have the opportunity to apply course work to a practical, on-the-job experience in an agricultural career setting. Students will create a portfolio that includes their engagement in research, report writing and reflection of the structure of the business, products that are sold and the importance of this agricultural field to the economy of our state and nation. Students will be able to apply this knowledge in their second year courses and as they continue to explore the various careers available in the agricultural sector.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (006-116) and (006-169) and (006-102) and (006-108) and (006-101) and (102-148)**Co-requisites:** (006-160) and (006-105) and (006-107) and (006-180) and (006-162) and (006-103)

Complete Course Listing

**006-201****Credits:** 3

This course is designed to assist students in developing career leadership skills for the agriculture industry. Units of study include: goal setting, strengths finder, career opportunities, employment preparation, industry issues, and the role of professional organizations in agriculture.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Air Cond & Refrigeration Tech (601)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**601-110 Air Conditioning Fundamentals****Credits:** 3

Air Conditioning Fundamentals is a course designed to teach the principles of operation of commercial and residential air conditioning systems as encountered in the HVAC/R servicing and installation business. This course is almost entirely theory with some laboratory covering the use of measuring instruments during operation of HVAC/R systems. All aspects of safety will be emphasized and reviewed throughout the course.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-111 Print Reading and Code****Credits:** 2

HVAC print reading is analyzed in relation to each of the curriculum's systems: heating, ventilation, air conditioning, and refrigeration. The students will be able to understand, recognize and apply symbols and specifications pertaining to each system as they are explained so that they can be followed in the system's installation and repair. Overview of National Codes and Standards will be discussed and reviewed.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-112 ACR Piping Practices****Credits:** 2

Students will examine and use the fundamental tools, equipment, and procedures used in pipefitting in this course. Matching system components and making proper connections are studied, planned, and practiced. Applications to domestic water distribution and hot water production will be reviewed. The student will also be introduced to duct work fabrication.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (601-121)

Complete Course Listing

**601-113 Refrigerant Recovery, Evacuation and Charging Methods****Credits:** 2

Students in this course will define, explain and analyze refrigerant recovery, recycle, and reclaim operations. Students will gain hands-on experience and practice in the installation, service, and repair of all HVAC and refrigeration systems as it pertains to EPA industry guidelines for recovery, recycle and reclaim operations.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-114 Industrial Comp Exam Review****Credits:** 1

This course will be a comprehensive review of all applications and experiences from HVAC two year program at BTC. Students will engage in discussion and take practice exams that will enable them to hone their skills and knowledge in preparation for the Industrial HVAC Comprehensive Licensing Exam.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-115 Electrical Fundamentals****Credits:** 3

A sound electrical background is essential in order to become a successful HVAC/R technician. Electrical Fundamentals provides experience with electrical theories, circuits, devices, and equipment. This is a combination lecture/lab course involving hands on experience with HVAC/R electrical components. There will also be an introduction to electrical diagram reading and drawing along with computer-aided tutorials. Electrical safety will be thoroughly discussed and reviewed during the course.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-116 Air Conditioning Fundamentals for HVAC/R****Credits:** 1

A/C Safety, Tools, Thermal Dynamics HVAC Terminology examines air conditioning safety, tools, thermal dynamics, terminology and math principles encountered in the HVAC/R industry.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing



**601-117 Air Conditioning Fundamentals HVAC/R 2****Credits: 1**

A/C Components, Refrigeration Cycle and Refrigeration Gauges examines matter and energy, introduces and analyzes the refrigeration cycle, examines refrigeration applied to air conditioning and teaches the installation of a refrigeration manifold gauge set on an operating residential split system.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-116)

Complete Course Listing

**601-118 Air Conditioning Fundamentals HVAC/R 3****Credits: 1**

Air Conditioning Fundamentals for HVAC/R 3 examines indoor air quality, introduces the has students practice using a psychrometric chart, and examines air distribution of commercial and residential air conditioning systems as encountered in the HVAC/R servicing and installation business.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-117)

Complete Course Listing

**601-121 Electrical Fundamentals for HVAC/R 1****Credits: 1**

Electrical Safety, Meter Usage and Ohm's Law examines electrical safety in HVAC/R, analyzes atomic structure and introduces electrical quantities. In addition, Ohm's Law formulas are introduced and utilized in lab activities that examine a simple series circuit. Electrical diagram reading and drawing will be integrated into the lab activities. This is a combination lecture/lab course involving hands on experience with basic electrical circuits.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-122 Electrical Fundamentals for HVAC/R 2****Credits: 1**

Parallel Circuits, Combination Circuits and Capacitors examines Ohm's Law as it relates to parallel circuits and combination circuits. Electrical diagram reading and drawing will be integrated into the parallel and combination circuit lab activities. Capacitors will also be introduced in application and function. This is a combination lecture/lab course involving hands on experience with parallel, combination circuits, in-line ammeter usage and capacitor testing.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-121)

Complete Course Listing

**601-123 Electrical Fundamentals for HVAC/R 3****Credits: 1**

Electrical Services, Wire Sizing and Electrical Diagrams examines electrical service, voltage systems and wire sizing. The effects of inductance and capacitance on an electric circuit will also be analyzed. In addition, electrical symbols and diagrams utilized in the HVAC/R industry will be analyzed through hands-on lab experiences.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-122)

Complete Course Listing

**601-125 Computerized (HVAC/R) Design****Credits: 3**

In this course, instruction will be given in blueprint reading and drawing of mechanical systems. Outlays of various heating and cooling systems in relation to architectural buildings are used. Proper mechanical schematic, isometric piping and flow diagrams are discussed and drawn. In addition, computer software is utilized to calculate heat loss and heat gains on residential and commercial buildings.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-126 Refrigeration Fundamentals****Credits: 2**

This course will study the function and operation of the basic components in the refrigeration cycle along with learning the use of service tools the HVAC/R technician will utilize on the job. Refrigeration Fundamentals is a combination lecture/lab course in which the students will be able to apply theory to the lab using actual HVAC/R equipment. Computer simulators will be introduced as teaching aids. On the job and lab safety will be emphasized.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-127 Computerized HVAC/R Design****Credits: 2**

In this course, instruction will be given in blueprint reading and drawing of mechanical systems. Outlays of various heating and cooling systems in relation to architectural buildings are used. Proper mechanical schematic, isometric piping and flow diagrams are discussed and drawn. In addition, computer software is utilized to calculate heat loss and heat gains on residential and commercial buildings.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-128 Print Reading and Code 1****Credits: 1**

This course will cover print reading and standards relevant to the installation and service of residential and light commercial HVAC systems. This course is an Online course. Classroom attendance is not necessary but you can use the computers in the classroom during open lab hours. In addition, paper prints are available in the classroom if you prefer.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-129 Print Reading and Code 2****Credits: 1**

This course continues to analyze the codes from prints, taking into consideration specific and unique building codes and standards relevant to the installation and service of residential and light commercial HVAC Systems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-130 Heating Systems****Credits:** 3

This course involves instruction and laboratory work on hydronic and steam systems. Students will be able to design, install, start-up and service gas and oil fired systems. This course is a combination of classroom presentation and lab.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing

**601-131 Refrigeration Fundamentals 1****Credits:** 1

This course will provide students with the opportunity to practice accessing sealed air-conditioning and refrigeration units utilizing a manifold gauge set. Additionally, students will practice testing and troubleshooting compressors and condensers.

**Aid Code:** 10 - Associate Degree.  
**Co-requisites:** 601-117  
Complete Course Listing

**601-132 Refrigeration Fundamentals 2****Credits:** 1

Evaporators, Metering Devices and Accessories will examine the process and tools required to gain access to a sealed system and develop a better understanding of the system metering devices and evaporations.

**Aid Code:** 10 - Associate Degree.  
**Co-requisites:** (601-131)  
Complete Course Listing

**601-133 Computerized HVAC/R Design 1****Credits:** 1

Heat Transfer Principles and Manual J teaches the fundamentals of heat transfer through different types of construction materials. Students will perform residential load calculations using ACCA Manual J8ae and computerized ACCA load calculation spread sheets.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing

**601-134 Computerized HVAC/R Design 2****Credits:** 1

Wrightsoft Load Calculations and RESCheck utilizes Wrightsoft to perform residential and commercial load calculations and duct sizing. In addition, RESCheck will be analyzed and applied to check structures code conformity for heat loss. The student will develop an understanding of energy conservation through the appropriate analysis and application of size and selection of HVAC equipment.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing

**601-135 Motors and Motor Controls****Credits:** 3

This course is designed to give the student an understanding of the operation of various types of control devices and how combinations of these devices can be applied and varied to secure the desired conditions in heating and cooling systems. Students will interpret and draw in depth wiring diagrams using actual HVAC/R equipment. Computers will also be utilized in the studying of wiring diagrams. This course is mostly application oriented, with a review of electrical theory and safety.

**Aid Code:** 10 - Associate Degree.  
**Pre-requisites:** (601-123)  
Complete Course Listing

**601-136 Motors and Motor Controls 1****Credits:** 1

Split Phase Motor Identification, Testing and Replacement is designed to examine motor identification, motor troubleshooting procedures and fan motor replacement. This course also reviews the basics of electrical theory and safety.

**Aid Code:** 10 - Associate Degree.  
**Pre-requisites:** 601-122  
Complete Course Listing

**601-137 Motors and Motor Controls 2****Credits:** 1

Variable Speed Motors, Current Relays, Potential Relays and PTC Relays examines how to wire and troubleshoot single phase motor starting components. In addition, students test the operation of ECM motors.

**Aid Code:** 31 - One-year Technical Diploma.  
**Co-requisites:** (601-136)  
Complete Course Listing

**601-138 Motors and Motor Controls 3****Credits:** 1

Transformers, Contactors, Relays and Motor Starters will introduce students to transformers, contactors, relays and motor starters. Students will gain hands-on experience through the application and analysis of wired lab boards and testing on HVAC/R equipment.

**Aid Code:** 10 - Associate Degree.  
**Co-requisites:** 601-136  
Complete Course Listing

**601-140 Control Circuit Applications****Credits:** 3

This course is designed to teach systems application of electrical controls in the HVAC/R field. Control Circuit Applications will continue to emphasize the understanding of wiring diagrams along with troubleshooting controls, mechanical and electro-mechanical controls, electronic control circuits, and HVAC/R control applications. This course is a combination of lab and theory.

**Aid Code:** 10 - Associate Degree.  
**Pre-requisites:** (601-135)  
Complete Course Listing

**601-141 Heating Systems 1****Credits: 1**

Gas Pipe Sizing, Gas Regulators and Gas Valves will examine the principles of natural gas heat as applied to residential heating systems. In addition, the student will apply proper gas piping techniques and will gas pipe a residential furnace. Testing/adjusting gas pressure on gas regulators and gas valves will also be analyzed and completed.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-142 Heating Systems 2****Credits: 1**

Residential Gas Furnaces will study gas heating operating and safety controls. Testing of these controls on residential and light commercial heating systems will be practiced and applied.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-141)

Complete Course Listing

**601-143 Heating Systems 3****Credits: 1**

Electric Heat and Air-to-Air Residential Heat Pump Systems will teach residential clean/tunes, the operation and testing of electric baseboard heating systems and split system air to air residential heat pumps with electric heat.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-142)

Complete Course Listing

**601-145 Heating Systems Applications****Credits: 3**

Heating System Applications covers the operation, maintenance and service of gas, propane and oil fired heating equipment. In addition, this class will also cover the operation and service procedure for heat pumps. This course is a balance of theory and application.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (601-130)

Complete Course Listing

**601-146 ACR Piping Practices 1****Credits: 1**

Flaring, Swagging and Soldering Copper Pipe utilizes safe copper piping industry skills. Students will learn to use tools to cut, ream, flare, bend and anneal copper pipe to specifications. Copper piping assemblies will be measured and cut to specifications and soldered in a variety of orientations to simulate a variety of real life applications.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-147 ACR Piping Practices 2****Credits: 1**

Air Acetylene and Oxy-Acetylene Brazing Copper Pipe has students measure and cut copper pipe to specifications and braze in a variety of orientations to simulate a variety of real life applications utilizing both air acetylene and oxy-acetylene.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-148 Refrigeration Recovery, Evacuation and Charging Methods 1****Credits: 1**

Refrigeration Recovery, Deep Evacuation and Charging of Residential, Light Commercial, Geothermal and Ice Machine Equipment has students recover refrigerant from a cylinder, residential split system, light commercial package gas/electric system, geothermal heat pump and an ice machine. After the refrigerant is recovered the student will perform a deep evacuation on the system. After the appropriate evacuation level is achieved, the student will utilize the manufacturer's literature and charge the system with the correct amount of refrigerant. Refrigerant handling and safety will be enforced in the lab.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 601-132

Complete Course Listing

**601-149 Refrigeration Recovery, Evacuation and Charging Methods 2****Credits: 1**

Refrigeration Recovery, Triple Evacuation and Charging of Heat Pumps and Refrigeration Equipment and EPA Test will have the student recover refrigerant from a residential split heat pump system, a mini-split heat pump system, a walk-in cooler system and a reach-in frozen food system. After the refrigerant is recovered the student will perform a triple evacuation on the system. After the appropriate evacuation level is achieved, the student will utilize the manufacturer's literature and charge the system with the correct amount of refrigerant. After the student has mastered the skills of recovery, evacuation, and charging the EPA Section 608 test will be administered. Refrigerant handling and safety will be enforced in the lab.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-148)

Complete Course Listing

**601-150 Air Conditioning Applications****Credits: 3**

This course includes the installation and service of air conditioning systems, including types of fan systems, duct service techniques, load calculating and estimating and air and fluid measurements. This course is a combination of classroom presentation and lab.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (601-110)

Complete Course Listing

**601-151 Air Conditioning Applications 1****Credits: 1**

Residential Split and Light Commercial Package Gas/Electric Cooling Applications provides the student with hands-on servicing experience of window air conditioners, residential split systems, packaged light commercial air conditioners.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-132) and (601-138)

Complete Course Listing

**601-152 Air Conditioning Applications 2****Credits:** 1

Residential Air-to-Air and Geothermal Heat Pump Systems Cooling Applications provides students with hands-on servicing experience of air-to-air heat pumps, geothermal heat pumps and water cooled unitary cooling systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-132) and (601-138)

Complete Course Listing

**601-153 Air Conditioning Applications 3****Credits:** 1

Commercial - Package, Split DX and Chilled Water A/C Applications provides students with hands-on servicing experience on high efficiency packaged commercial air conditioners, commercial split systems and water to air commercial chiller systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-132) and (601-138)

Complete Course Listing

**601-155 Refrigeration Applications****Credits:** 3

This course involves servicing of commercial refrigeration systems using meters and service tools. Studies and calculations are made of commercial refrigeration systems, along with the design and selection of equipment. Refrigeration Applications is primarily hands on with some theory.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (601-120 or 601-126)

Complete Course Listing

**601-156 Control Circuit Applications 1****Credits:** 1

Refrigeration and HVAC Temperature Control Systems tests the operation of transformers, capacitors, relays, contactors and motor starters on HVAC/R systems. In addition, wiring diagrams will be created from circuit descriptions for temperature controls, solenoids, thermostats and defrost clocks. The wiring diagrams will be used to wire these components on lab boards. Testing of temperature controls, solenoids, thermostats and defrost clocks and on actual equipment will be performed as well.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 601-138

Complete Course Listing

**601-157 Control Circuit Applications 2****Credits:** 1

Refrigeration and A/C Control Systems is designed to teach the applications of the high pressure control, low pressure control and oil pressure safety control on a refrigeration system. Students will draw the pictorial and schematic wiring diagrams for the recycling and non-recycling pump down circuit. In addition, the student will wire and test pump down controls on lab boards and test the pump down control system on a reach-in frozen food system. Finally, the students will test the operation of the KE2 energy management refrigeration pump down control system utilizing the front end controller and internet-based control system.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-156)

Complete Course Listing

**601-158 Control Circuit Applications 3****Credits:** 1

Heating and Package Gas/Electric Control Systems teaches gas heating control system and package gas electric control systems. Students will test the control system operation on direct fired residential furnaces. In addition, students will wire and test indirect ignition control systems on lab boards and on heating systems. Finally students will test the control system on a package gas/electric package unit.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 601-142

Complete Course Listing

**601-160 Hydronic Systems****Credits:** 3

This course involves instruction and laboratory work on hydronic and steam systems. Students will be able to design, install, start-up and service gas and oil fired systems. This course is a combination of classroom presentation and lab.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (601-130)

Complete Course Listing

**601-161 Advanced Compressors, Condensers, Metering Devices, and Evaporators****Credits:** 1

Advanced Compressors, Condensers, Metering Devices, and Evaporators examines cylinder handling safety and refrigerant safety. In addition, refrigeration service valves will be adjusted and set to achieve gauge readings and to pump down a system. Air conditioning and refrigeration evaporators and condensers will be tested under various load conditions. Advanced compressor and metering device applications will also be tested.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-132) and (601-138)

Complete Course Listing

**601-162 Refrigeration Applications 2****Credits: 1**

Walk-in Coolers/Freezers and Reach-in Freezers teaches students to test the operation of reach-in freezers and walk-in freezers. Through hands-on lab activities, students will review the refrigeration fundamentals and apply these to fix and troubleshoot operation of varying units.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 601-161

Complete Course Listing

**601-163 Refrigeration Applications 3****Credits: 1**

Students in this course will test the operation of cube and flake ice machines. Through hands-on lab activities, students will review the refrigeration fundamentals and apply these to fix and troubleshoot operation of varying units.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 601-161

Complete Course Listing

**601-165 Electronic Energy Management Systems****Credits: 3**

Major types of automatic electrical control systems are described and compared. Programs, sensing and control points, signal transmission and processing, and other peripheral equipment which make up a complete building monitoring and control automation system are also explored. Students will be able to utilize computer controls either on the HVAC/R equipment or at a computer station to evaluate equipment operation. This course is a mixture of lecture along with some lab work.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (601-140) and (804-308 or 804-114)

Complete Course Listing

**601-166 Electronic Energy Management Systems 1****Credits: 1**

Residential, Light Commercial Package Gas/Electric and Refrigeration Control Systems covers the advanced control circuit applications applied to residential split systems, package gas/electric systems and refrigerated fixtures with remote condensing units. In addition, an E2 system controlling a reach-in frozen food case will be programmed and tested.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-158)

Complete Course Listing

**601-167 Electronic Energy Management Systems 2****Credits: 1**

Commercial Package Gas/Electric BAS has students test the operation of Trane Precedent and Voyager Constant Volume RTUs through the Trane SC energy management system. In addition, the Lennox Prodigy system will be tested and results analyzed on a RTU.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-158)

Complete Course Listing

**601-168 Electronic Energy Management Systems 3****Credits: 1**

Commercial Split and Geothermal BAS will have the KE2 Low Temp + Defrost control system tested. In addition, Trane SC control of a commercial air handler with a DX split system and an in-line duct furnace supplying air to zoned re-heat boxes will be tested. Also a commercial air handler with a chiller and chilled water coil, a hydronic boiler and hot water coil hot with zoned water re-heat coils will be tested. Finally, the Trane SC wireless energy management system controlling the operation of the geothermal heat pumps will be tested.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-158)

Complete Course Listing

**601-170 Heating, Ventilation, Air Conditioning and Refrigeration (HVAC/R) Service Internship****Credits: 3**

Students will have the opportunity to apply their classroom experience on the job. Local HVAC/R contractors have shown great interest in the program and are willing to accept students for internship. Internship time can be accrued throughout the two-year program to achieve a total of 108 hours.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**601-171 HVAC Installation 1****Credits: 1**

Residential Split System Gas and Refrigeration Pipe Installation teaches the student to install black gas pipe and ACR piping on a split residential system. The student will perform basic residential load calculation and duct sizing using industry standard software. The student will use information gathered to select the correct HVAC system for the application. The student will install a gas fired furnace along with a condensing unit, evaporator, gas piping and refrigeration piping.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-141) and (601-147)

Complete Course Listing

**601-172 HVAC Installation 2****Credits: 1**

In Residential Split System Duct and Controls System Installation and Start-up students will be involved in the fabrication and installation of duct work on a residential furnace. In addition, a zoning control system will be installed by students and start up tests will be performed per manufacturers' instruction.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-171)

Complete Course Listing

**601-173 HVAC Installation 3****Credits: 1**

In Split Refrigeration System Installation students will be involved in piping, wiring and starting-up of a refrigeration pump down system. The system tests will be performed and checked by students using industry standards.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-157) and (601-147)

Complete Course Listing



**601-175 Servicing, Troubleshooting Heating, Ventilation, Air Conditioning and Refrigeration Equipment****Credits:** 3

Various methods of troubleshooting and servicing of HVAC/R systems are studied. Utilizing manufacturer's guidelines and service tools, the student will demonstrate customer relations, mechanical aptitude and bookkeeping skills that are essential to becoming a well rounded service technician. The students will also perform computer simulated service calls to reinforce knowledge. This class is almost entirely hands on.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (601-140) and (601-150) and (601-155)

Complete Course Listing

**601-176 Heating Systems Applications 1****Credits:** 1

Residential Oil Heat, Dual Fuel Systems and Two Stage Heat Pump Heating Applications teaches residential oil furnaces, dual fuel heating systems and residential 2 stage heat pumps. Students will be introduced to the various components that make up these systems and will be able to troubleshoot, maintain and service this equipment per manufacturer's instructions.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-142)

Complete Course Listing

**601-177 Heating Systems Applications 2****Credits:** 1

Mini-Split, Light Commercial Gas/Electric Package and Unit Heater Heating Applications teaches mini-split heat pump systems, gas fired unit heaters and light commercial gas/electric systems. Students will be introduced to the various components that make up these systems and will be able to troubleshoot, maintain and service this equipment per manufacturer's instructions.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-142)

Complete Course Listing

**601-178 Heating Systems Applications 3****Credits:** 1

Commercial-Package Gas/Electric, Hydronic and In-Line Duct Heating Applications teaches commercial package gas/electric systems. This class will also instruct commercial air handlers with in-line duct furnace and electric zone re-heat VAVS. Finally students will receive instruction on commercial air handlers with hydronic heat and hot water VAV re-heat coils. Students will be introduced to the various components that make up these systems and will be able to troubleshoot, maintain and service this equipment per manufacturer's instructions.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-142)

Complete Course Listing

**601-180 Heating, Ventilation, Air Conditioning and Refrigeration (HVAC/R) Installation****Credits:** 3

This course involves installing, starting up and maintaining a gas fired furnace with a central air conditioning system. The learner will begin by performing a residential load calculation and duct sizing using industry standard software. The information gathered from the load sizing software will then be used to select the correct HVAC system for the application. The student will then install the gas fired furnace along with the condensing unit, evaporator, ductwork, gas piping, refrigeration piping and control system. This course is almost entirely hands-on.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (601-120 or 601-126) and (601-130)

Complete Course Listing

**601-181 Hydronic Systems 1****Credits:** 1

Hydronic Systems Theory involves instruction on system design of hydronic and steam systems. Students will be able to distinguish the differences between systems and have an understanding of the different applications for each system.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-142)

Complete Course Listing

**601-182 Hydronic Systems Design and Mechanical Installation****Credits:** 1

In Hydronic Systems Design and Mechanical Installation, students engage in system installation on hydronic and steam systems. Students prepare and install the systems they designed in Hydronic Systems Theory.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-143) and (601-146) and (601-181)

Complete Course Listing

**601-183 Hydronic Systems 3****Credits:** 1

Hydronic Systems Controls and Start-up has students install a zone control system on a hydronic system and perform a system start-up.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-182)

Complete Course Listing

**601-185 Service and Troubleshooting HVAC/R 2****Credits:** 1

This course is a continuation of Service and Troubleshooting HVAC/R 1. Students will continue to apply various methods of troubleshooting and servicing of HVAC/R systems. Utilizing manufacturer's guidelines and service tools, the student navigate customer relations, display mechanical aptitude and demonstrate bookkeeping skills that are essential to becoming a well rounded service technician.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-143) and (601-153) and (601-158) and (601-163)

Complete Course Listing



**601-186 Service and Troubleshooting HVAC/R 3****Credits:** 1

This course is a continuation of Service and Troubleshooting HVAC/R 2. Students will continue to analyze and troubleshoot issues while servicing HVAC/R systems. Utilizing manufacturer's guidelines and service tools, the student navigate customer relations, display mechanical aptitude and demonstrate bookkeeping skills that are essential to becoming a well rounded service technician.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-143) and (601-153) and (601-158) and (601-163)

Complete Course Listing

**601-187 Industrial Competency Exam Preparation****Credits:** 1

Students engage in a comprehensive review of all applications and experiences from program courses. Students will engage in discussion and take practice exams that will enable them to hone their skills and knowledge in preparation for the Industrial HVAC Comprehensive Licensing Exam.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (601-143) and (601-153) and (601-158) and (601-163)

Complete Course Listing

## Automobile-Mechanical (404)

Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**404-100 Service Fundamentals 1****Credits:** 1

In this course students will demonstrate basic hand tool applications, identify and practice service facility safety procedures, and identify careers and certifications in the automotive service sector.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-101 Service Fundamentals 2****Credits:** 1

In this course students will demonstrate basic power tool applications, identify and practice equipment and lift safety procedures, and use comprehensive and manufacturer shop manuals to perform basic under-hood and under-car services.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-102 Brake Service 1****Credits:** 1

In this course students will define the purpose and function of hydraulic brake system components. Additionally, they will measure and inspect hydraulic brake system components to diagnose repairs. Students will practice safety protocols and general brake services and procedures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-103 Brake Service 2****Credits:** 1

In this course students will define the purpose and function of disc brake system components. Additionally, they will measure and inspect disc brake system components and perform repairs on those components.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-102)

Complete Course Listing

**404-104 Brake Service 3****Credits:** 1

In this course students will describe the purpose and function of drum brake system components. Additionally, they will measure and inspect drum brake system components and perform maintenance and repair on those components.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-103)

Complete Course Listing

**404-105 Brake Service 4****Credits:** 1

In this course students will define the purpose and function of wheel bearings and common electronic brake control systems. They will perform maintenance and repair tasks on wheel bearings and electronic brake control systems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-104)

Complete Course Listing

**404-106 Steering & Suspension 1****Credits:** 1

In this course the student will define the functions and features of wheels and tires, including safety features, distortion, and center of gravity. They will perform tire maintenance and repair procedures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-107 Steering & Suspension 2****Credits:** 1

In this course students will define the functions and features of steering systems. They will perform diagnosis, maintenance, and repair on various steering systems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-106)

Complete Course Listing

**404-108 Steering & Suspension 3****Credits:** 1

In this course students will define the purpose and function of suspension systems and various components. Students will perform maintenance and repair on suspension systems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-107)

Complete Course Listing

**404-109 Steering & Suspension 4****Credits:** 1

In this course students will define the purpose and function of wheel alignment and perform wheel alignment. Students will also identify wheel alignment problems given various diagnostic scenarios.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-108)

Complete Course Listing

**404-110 Engine Repair 1****Credits:** 1

In this course students will define the purpose and function of components of automobile engines and remove, inspect, and reinstall engines. Additionally, students will diagnose and repair cylinder head and valve train problems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-111 Engine Repair 2****Credits:** 1

In this course students will define the purpose and function of components of automobile engine block assemblies. Students will practice diagnosing and repairing engine block assembly problems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-110)

Complete Course Listing

**404-112 Engine Repair 3****Credits:** 1

In this course students will define the purpose and function of components of engine lubrication and cooling systems. Students will practice diagnosing and repairing lubrication and cooling system assembly problems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-111)

Complete Course Listing

**404-113 Engine Repair 4****Credits:** 1

In this course students will define the purpose and function of components of engine ignition and fuel systems. Students will practice diagnosing engine condition, as well as inspecting and testing the impact of the ignition and fuel systems on engine performance.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-112)

Complete Course Listing

**404-114 Drive Train Service 1****Credits:** 1

In this course students will explore the principles and theory of the manual transmission transaxle system. Students will also define the function and purpose of components of the clutch system.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-115 Drive Train Service 2****Credits:** 1

In this course students will practice diagnosis and maintenance of the manual transmission transaxle system.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-114)

Complete Course Listing

**404-116 Drive Train Service 3****Credits:** 1

In this course students will define the function and purpose of components of drive shafts, axles, final drives, 4-wheel drive systems, and all-wheel drive systems. Students will practice inspection, repair, and maintenance of these systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-115)

Complete Course Listing

**404-117 Heating & Air Conditioning Service 1****Credits:** 1

In this course students will explore the principles and basic functions of automobile heating and air conditioning systems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-118 Heating & Air Conditioning Service 2****Credits:** 1

In this course students will practice and demonstrate their ability to inspect, repair, and maintain heating and air conditioning systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-117)

Complete Course Listing

**404-119 Heating & Air Conditioning Service 3****Credits:** 1

In this course students will define the function and purpose of components of electronic climate control systems. Students will demonstrate their ability to inspect, repair, and maintain electronic climate control systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-118)

Complete Course Listing

**404-120 Heating & Air Conditioning Service 4****Credits:** 1

In this course students will explore the function and principles behind air conditioning system refrigerant recovery and charging.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-119)

Complete Course Listing

**404-121 Electrical Service 1****Credits:** 1

In this course students will define the purpose and function of different types of circuits, (series, parallel and series-parallel). Students will demonstrate how to calculate volts, amps and ohms.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-122 Electrical Service 2****Credits:** 1

In this course students will practice and demonstrate their ability to follow schematics and diagrams, use automotive information systems, and trace the flow of current from battery, through the load to ground.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-121)

Complete Course Listing

**404-123 Electrical Service 3****Credits:** 1

In this course students will practice and demonstrate the use a digital meter to test and analyze vehicle circuits.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-122)

Complete Course Listing

**404-124 Electrical Service 4****Credits:** 1

In this course students will demonstrate their ability to analyze starting and charging circuit voltage drops, diagnose parasitic drain, and identify problems using schematics and digital meters. Students will be able to define the purpose and function of relays.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-123)

Complete Course Listing

**404-125 Electronic Engine Control Fundamentals 1****Credits:** 1

In this course students will practice and demonstrate the use of an automotive oscilloscope to view waveforms.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-126 Electronic Engine Control Fundamentals 2****Credits:** 1

In this course students will define the purpose and function of scan tools, temperature sensors, and throttle position sensors. Students will demonstrate how to test temperature sensors and throttle position sensors using a scan tool and oscilloscope.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-125)

Complete Course Listing

**404-127 Electronic Engine Control Fundamentals 3****Credits:** 1

In this course students will identify the application of manifold absolute pressure and barometric pressure to mass air flow sensors. Students will define how automotive computers use mass air flow sensors. Students will practice and demonstrate their ability to test these sensors using a scan tool and oscilloscope.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-126)

Complete Course Listing

**404-128 Electronic Engine Control Fundamentals 4****Credits:** 1

In this course students will define the purpose and function of oxygen sensors. Students will practice and demonstrate how to test oxygen sensors using a scan tool and oscilloscope.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-127)

Complete Course Listing

**404-129 Electronic Engine Control Diagnosis 1****Credits:** 1

In this course students will demonstrate their ability to diagnose and analyze vehicle emission and drivability problems by using a scan tool in conjunction with diagnostic codes and automotive computer modes.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-128 or 404-351)

Complete Course Listing

**404-130 Electronic Engine Control Diagnosis 2****Credits:** 1

In this course students will practice and diagnose proper operation of vehicle computer control and engine systems using a scan tool and information from oxygen sensors, fuel trim, and automotive computer monitors.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-129 or 404-357)

Complete Course Listing

**404-131 Computerized Fuel Systems Service 1****Credits:** 1

In this course students will define the purpose and function of components of computerized fuel systems. Students will practice and demonstrate their ability to diagnose, test, and repair mechanical and electrical components of computerized fuel systems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-130 or 404-357)

Complete Course Listing

**404-132 Computerized Fuel Systems Service 2****Credits:** 1

In this course students will define the purpose and function of various types of injectors. Students will explore the interaction between injector pulse width and the use of fuel trim as a diagnostic tool. Students will demonstrate their ability to test injector operation.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-131)

Complete Course Listing

**404-133 Engine Performance Testing 1****Credits:** 1

In this course students will demonstrate their ability to diagnose and assess the operation of the ignition system.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-130 or 404-357)

Complete Course Listing

**404-134 Engine Performance Testing 2****Credits:** 1

In this course students will define the purpose and function of the battery starting and charging system. Students will demonstrate their ability to test for parasitic drain and to test and diagnose the battery systems using an oscilloscope, scan tool, and multi-meter.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-133)

Complete Course Listing

**404-135 Engine Performance Testing 3****Credits:** 1

In this course students will define the relationship of the engine control systems and emission monitors. Students will demonstrate their ability to repair drivability problems related to these systems, as well as how to diagnose them.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (404-134)

Complete Course Listing

**404-136 Engine Performance Testing 4****Credits:** 1

In this course students will review and demonstrate comprehensive ability in the skills typically introduced during the first year of the program, including safety practices and the inspection and repair of brake systems, steering and suspension systems, engine systems, drive train systems, and heating and air conditioning systems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-135)

Complete Course Listing

**404-137 Drive Train/Transaxle Testing 1****Credits:** 1

In this course students will define the purpose and function of automatic transmissions and their components. Students will demonstrate their ability to inspect, diagnose, and maintain automatic transmissions.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-130)

Complete Course Listing

**404-138 Drive Train/Transaxle Testing 2****Credits:** 1

In this course students will define the purpose and function of the torque converter clutch. Additionally, students will demonstrate the ability to diagnose automatic transmission problems using a scan tool, and to differentiate between engine and transmission drivability problems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (404-137)

Complete Course Listing

**404-139 Auto Machine Shop****Credits:** 1

In this course students will practice and demonstrate essential machining skills used in automotive service facilities, including oxygen acetylene torch cutting and heating, repairing bolt threads, machining brake rotors on-and-off vehicle, and the use of a manual brake lathe.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-140 Service Simulation****Credits:** 2

This course will allow students to visit dealerships, independent shops, and auto repair franchises to observe operations, procedures, and equipment of an operating shop or business.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-141 Service Management****Credits:** 1

In this course students explore state and federal regulations concerning automotive servicing. Students will demonstrate their ability follow documentation procedures common to automotive service facilities.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-142 Emission Control Service and Certification****Credits:** 1

In this course students will demonstrate the use of diagnostic equipment to diagnose, adjust, replace, and repair emission-related components and parts.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-143 ASE Certification****Credits:** 1

In this course students demonstrate readiness to complete ASE Certification through review of suspension and steering systems, electrical reading, and brake systems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-144 Service Internship****Credits:** 2

This course provides students with the opportunity to demonstrate automotive inspection, repair, and maintenance skills in an operating service facility. Students will also complete a comprehensive report on their experiences after meeting the internship requirements.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-145 Customer Service Fundamentals****Credits:** 2

In this course students will explore principles of successful customer service and relations. Students will demonstrate skills in relationship building and management through practical interviews and role-playing.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**404-338 Service Fundamentals****Credits:** 2

Introduction to the automotive service facility. Safety, basic hand tool and power tools application is defined to help the prospective automobile technician work safely and efficiently. Students will learn how to use both comprehensive and manufacturer's shop manuals to perform basic under-hood and under-car services.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-339 Engine Service****Credits: 4**

This course is designed to introduce the student to the theory of gasoline engine operation and design. The course also includes methods of diagnosis, disassembly, measurement, and reassembly. Emphasis is placed upon diagnostic ability and skill development.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-342 Heating & Air Conditioning Service****Credits: 4**

This course provides a basic understanding of the automobile cooling and air conditioning system. Theory of air conditioning is defined. Emphasis is placed on laboratory performance and related skills development.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-343 Automotive Machine Shop****Credits: 1**

This course is designed to acquaint the student with automotive machine shop practices. It gives the student an opportunity to correctly use tools such as the outside micrometer, telescoping gauge, drill press, brake rotor and drum lathe, and other measuring instruments. Both English and metric systems are covered in this course.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-345 Brake Service****Credits: 4**

The student is introduced to the fundamentals of automotive brake systems including drum, disc, hydraulic, power, and antilock systems. Brake measurement is a high priority.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-346 Steering & Suspension Service****Credits: 4**

The student is introduced to basic wheel alignment, suspension systems, and steering systems. Computerized four-wheel alignment is a high priority in this course.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-347 Drive Train Service 1****Credits: 3**

This course is designed to introduce the student to the fundamentals of the power train. Emphasis is placed on the diagnosis and repair of differentials and manual transmissions.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-348 Service Simulation****Credits: 2**

This course is designed to introduce the student to shop operating procedures. Students can obtain credit for part-time employment in an automotive related work environment.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-349 Service Management****Credits: 1**

The student becomes familiar with the use of service related documents and procedures in this course. Emphasis is placed on shop liability and state and federal laws concerning automotive servicing.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-350 ASE Certification Review****Credits: 1**

This course is designed to prepare the student for ASE certification.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-351 Electronic Engine Control Fundamentals****Credits: 4**

This course is designed to introduce the student to computerized engine controls and related electrical components. Emphasis is placed on theory of operation and diagnostics using state of the art diagnostic equipment. Special emphasis will be placed on skillfully understanding and using shop manuals for related systems.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-352 Computerized Fuel Systems Service****Credits: 2**

The student is introduced to various computerized fuel systems. Topics covered are: electronic fuel injection, throttle body injection systems, port fuel injection, multi-port injection systems and sequential injection systems. Emphasis is placed on diagnostics and development of skills in using sophisticated diagnostic equipment.

**Aid Code:** 32 - Two-year Technical Diploma.**Pre-requisites:** (404-357)

Complete Course Listing

**404-353 Emission Control Service and Certification****Credits: 1**

This course is designed to help the student develop skills necessary to diagnose, adjust, replace, or repair emission related component parts by skillfully demonstrating the use of diagnostic equipment.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-354 Engine Performance Testing****Credits: 4**

This course is designed to maintain OBD II computerized vehicles and develop systematic repair procedures through the use of shop manuals and sophisticated diagnostic equipment. Emphasis is placed on driveability problems.

**Aid Code:** 32 - Two-year Technical Diploma.**Pre-requisites:** (404-357)

Complete Course Listing

**404-355 Drive Train/Transaxle Service II****Credits: 2**

This course is designed to introduce the student to automatic transmission and transaxle service.

**Aid Code:** 32 - Two-year Technical Diploma.**Pre-requisites:** (404-357)

Complete Course Listing

**404-356 Electrical Service****Credits: 4**

This course is designed to help the students learn how to diagnose and repair electrical problems related to automobile accessories. Emphasis is placed on skillfully understanding and testing procedures necessary for repair.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**404-357 Electronic Engine Control Diagnosis****Credits: 2**

This course is a composite of all computerized systems. Emphasis is placed on electrical skills, diagnostic procedure, driveability problems, and repair. An over view of engine computer function, computerized fuel delivery, emission controls, and computer chassis control is included.

**Aid Code:** 32 - Two-year Technical Diploma.**Co-requisites:** (404-351)

Complete Course Listing

**404-358 Service Internship****Credits: 2**

Students wishing for hands-on shop experience can obtain two credits for on-the-job training related directly and in cooperation with a service facility. Prior consent of automotive instructor is required. The student completes a comprehensive study after successfully completing the intern requirements.

**Aid Code:** 32 - Two-year Technical Diploma.**Pre-requisites:** (404-357)

Complete Course Listing

## Business Management (102)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**102-100 Intro to Entrepreneurial Career****Credits: 3**

This course will incorporate lecture and discussion materials to improve students' understanding of basic business and entrepreneurship topics. It will include a hands-on component involving interaction with local employers, and community leaders will expose participants to business and management career opportunities available to AAS program graduates.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-109 Business Careers Planning and Communication****Credits: 3**

This course covers how to use professional and effective communication in business settings. Students learn and practice business oral communication, presentations, and various forms of written communication. Business career exploration, resume writing, and interviewing are also addressed in this course.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (103-106 or 103-128 or 102-138 or 103-116 or 106-146 or 103-138)

Complete Course Listing

**102-110 Business Careers Planning****Credits: 1**

In Business Career Planning, students will focus on personal and professional preparation for a career in business related occupations. The course covers interpersonal and intrapersonal success skills including self-esteem, understanding human behavior, creative problem solving and decision making, effective communication skills, time management, setting priorities, and organizational techniques. Job search strategies will be introduced.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-115 Management Principles****Credits: 3**

Students will receive a comprehensive overview of the functions and principles of management that leads to success in the operating climate of modern businesses. The five functions of management will be introduced and applied to business operational problem-solving.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (102-148)**Co-requisites:** (801-195 or 801-136 or 102-109)

Complete Course Listing

**102-120 Small Business Management****Credits: 3**

The course provides a detailed study of all phases of managing a small business. Specific problems of small operations such as financing, developing, staffing, and growing a small business are analyzed. Management topics such as quality, leadership, applications of technology, legal issues and more will be applied to isolating significant problems and implementing solutions. Current issues and trends in entrepreneurship will be included.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (102-115) and (104-102)

Complete Course Listing



**102-121 Customer Service Management****Credits:** 3

Customer Service Management examines the role of managing customer service to add value and achieve a firm's long-term goals. Topics include the purpose of customer service; development of customer service goals, policies and plans; training, development and evaluation of customer service staff; development of sales skills; and using conflict resolution techniques to handle difficult customer service situations. Emphasis is placed on management duties and communication to provide customer satisfaction for both internal and external customers.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 102-115

Complete Course Listing

**102-122 Business Sustainability Planning****Credits:** 3

Learners in this course will be introduced to current topics influencing business practices relative to business sustainability. Concepts include green business, planning business sustainability programs, and leading corporate social responsibility efforts that may provide a foundation for both business profitability and environmentally friendly processes. Learners will discuss green business practices, analyze case studies, and take away a management process for identifying and implementing sustainability projects, which also contribute to an organization's triple bottom line.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (804-123 or 804-134 or 804-118)

Complete Course Listing

**102-125 Business Management Internship****Credits:** 2

This course is a work-based learning program involving actual business operations in the community. It is intended to provide students with actual work experience. Students will obtain a position at an approved worksite, and work a minimum of 144 hours under the supervision of both their instructor and an onsite supervisor. Students must have a minimum 2.0 overall GPA to enroll in the course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (102-110) and (102-115)

Complete Course Listing

**102-126 Business Plan and Entrepreneurship****Credits:** 2

This course is a learning program involving planning actual business operations. It is intended to provide students with the tools to start their own business. Students will improve their understanding of entrepreneurship topics. They will also research, develop, write, and present a business plan. Students must have a minimum 2.0 overall GPA to enroll in the course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (102-110) and (101-117) and (102-115) and (102-120) and (104-102)

Complete Course Listing

**102-127 Business Management Internship****Credits:** 3

This course is a work-based learning program involving actual business operations in the community. It is intended to provide students with actual work experience. Students will obtain a position at an approved worksite, and work a minimum of 144 hours under the supervision of both their instructor and an onsite supervisor. Students must have a minimum 2.0 overall GPA to enroll in the course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (102-109) and (102-115) and (196-193 or 116-193)**Co-requisites:** (101-117 or 101-111) and (102-120) and (102-122) and (102-155)

Complete Course Listing

**102-128 Business Plan and Entrepreneurship****Credits:** 3

The course is a learning program involving planning actual business operations. It is intended to provide students with the tools to start their own business. Students will improve their understanding of entrepreneurship topics. They will also research, develop, write, and present a business plan. Students must have a minimum 2.0 overall GPA to enroll in the course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-117 or 101-111) and (102-109) and (102-115) and (102-120) and (104-102) and (801-195 or 801-136)

Complete Course Listing

**102-130 Business Finance and Budget Management****Credits:** 3

This is a basic finance course for managers and supervisors. The learner applies the skills necessary to achieve an understanding of the fiscal/monetary aspects of business. Each learner will demonstrate application of business types, cycles, forecasting, budgeting, expense control, and financial statement interpretation relevant to the supervisor as a non-accountant. These financial principles will then be applied to the manager's role in decision-making and includes problem-solving case studies.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-117 or 101-111) and (102-115 or 101-112) and (103-128 or 103-106 or 103-138) and (102-148) and (103-107)

Complete Course Listing

**102-131 Introduction to Business Sustainability****Credits:** 1

This course will provide an introduction of current topics that influence business practices relative to business sustainability. Concepts include developing business sustainability efforts, beginning corporate social responsibility efforts and planning for profitable and environmentally friendly processes. Learners will discuss green business practices, analyze case studies and discuss an organization's triple bottom line.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-132 Lean Operations****Credits: 1**

Upon completion of this course, learners will develop their understanding of how to assess a manufacturing process and review the transformation of inputs to outputs. Learners will analyze non-value added activities within work flows and consider the underlying values of a lean enterprise. Learners will explore the characteristics of an organizational culture necessary to develop a lean operation and study various production methods that will enable efficiencies including JIT (Just in Time), quality management, quality control, continuous improvement methodologies, statistical process control chart interpretation, material handling and production logistics.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-133 Lean Tools****Credits: 1**

In this course, learners will examine the lean tools available to identify and eliminate wastes from a process. Learners will examine the benefits and challenges of conducting a 5S implementation strategy, A3 Storyboard strategy, and root cause analysis. Learners will utilize process mapping to evaluate and develop plans to reduce and/or eliminate waste and evaluate the various approaches to continuous improvement.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-134 Lean Six Sigma****Credits: 3**

Upon completion of this course, learners will have developed a body of knowledge around Six Sigma concepts that qualify them to become Green Belt Certified. This includes an introduction to Six Sigma, recognition of the DMAIC methodology, and assessing a lean enterprise. Learners will develop their ability to do statistical evaluations to evaluate a production process. Learners will work through the Define, Measure, Analyze, Improve and Control phases to implement a problem solving or continuous quality improvement. Learners will examine the steps of planning and executing a kaizen event as well as utilize the seven SPC (statistic process control) tools to improve a process.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-135 Lodging Management****Credits: 3**

This course takes a management perspective in introducing students to the organization and structure of hotels, restaurants, clubs, cruise ships, and casino hotels. Topics include: business ethics, franchising, management responsibility such as human resources, marketing and sales, and advertising.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-136 Hotel Operations Management****Credits: 3**

This course takes a management perspective in introducing students to lodging operations. There are chapters on Structure and service in the lodging industry, front office, housekeeping, sales, and marketing accounting human resources and maintenance departments. Also chapters in safety and security and careers in the lodging industry.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-137 Business Communications****Credits: 1**

In Business Communications, students will learn the basics of professional and effective communication in business settings. Students will receive instruction and feedback on oral communication as well as the use of written communications to include business emails, memos, and letters. The importance of favorable and appropriate communication with both internal and external parties will be covered. All written communication will require keyboard use.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-139 Culinary Business Administration****Credits: 3**

This course introduces the student to basic bookkeeping, and management reporting. The student is taught how to establish and maintain a basic bookkeeping system.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-104) and (316-107) and (316-114) and (316-119) and (316-164)

Complete Course Listing

**102-148 Introduction to Business and Management****Credits: 3**

Students will be introduced to business operations, focusing on a basic understanding of the activities, functions, and principles of business enterprises. This course covers the responsibilities and challenges of operating a business. The course emphasizes human relations, management, marketing, finance, human resources, global business, and starting a business.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-150 Global Business Fundamentals****Credits: 3**

This course is designed to give students a fundamental understanding of the environment in which international business operates and of the business practices required to compete successfully in global markets. Topics include: country differences in political, economic, cultural, and ethical systems; cross-border trade and investment; global monetary systems; strategies involved in international business; and management challenges in global markets.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (102-148) and (801-195)

Complete Course Listing

**102-155 Introduction to Project Management****Credits: 3**

This course gives an overview of project management principles and covers the fundamental knowledge and skills needed to improve the outcome of any project. It focuses on the project management processes and knowledge areas. Students will learn how to plan, schedule, and control projects. Students will learn project management tools and techniques and use them to define project goals, objectives, costs and time, and manage project scope, schedule and resources.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**102-156 Project Leadership and Communications****Credits: 3**

This course focuses on soft skills, including leadership, communications, team organization and development, and conflict management. It will provide students with the essential management and leadership skills to lead a project with confidence. Students will learn how to build high-performance project teams through effective leadership and influence, utilize management skills to encourage productivity and cooperation, and implement creative problem-solving techniques to ensure project success.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (102-155 or 196-111)

Complete Course Listing

**102-157 Managing Projects****Credits: 2**

This course focuses on using the Microsoft Project software to plan, schedule and control projects. Students will define a project's scope and apply work breakdown structure (WBS), the foundation of project planning. Students will learn how to configure tools and options, set-up projects, estimate, schedule, and budget projects.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (102-156) and (102-155 or 196-111)

Complete Course Listing

**102-158 Project Management Capstone****Credits: 3**

This course is designed to give students practical experiences in managing projects. Students will be given the opportunity to review, synthesize, and apply their project management knowledge and skills from prior courses and experience. Students will be working in a lab setting leading a real-life project and project management deliverables, including project charter, project plan, status reports, and post-project reviews. Students will facilitate meetings, track planned and actual values, and update project plans.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (102-155 or 196-111) and (102-156) and (102-157)

Complete Course Listing

**102-160 Business Law****Credits: 3**

This course is designed to provide the student with a working knowledge of law as it relates to the rights and responsibilities of businesses and individuals. Emphasis is placed on torts, contracts, case analysis, ethics, and social responsibility, particularly in the business context.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

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**Career Education (862)****Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****862-764 BSE Employability Skills/Career Decision 2****Credits: 3**

Develops general information involved with career choices including self-concept, values, needs and abilities. Occupational information and expansion of vocational choices are included. Outside speakers are invited to share information. Hands on experience includes filling out forms, interviews and study of resumes.

**Aid Code:** 74 - Interm ABE (6.0-8.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

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**Communication Skills (801)****Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****801-119 Mass Communications****Credits: 3**

This is a course designed for students who are interested in learning about music, radio, television, and film. However, the nature and scope of the course goes beyond mere media appreciation. The overall objective is to provide students with an understanding of the forms of Mass Communication and insure that the students learn how to communicate interpersonally about the films, television shows, and radio music that they see and hear. Main learning activities: movies, recorded music and television shows will be seen and heard regularly in class and discussed and critiqued formally outside of class.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**801-136 English Composition 1****Credits:** 3

This course is designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students will analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals will develop critical reading skills through analysis of written documents.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Writing Skills, 44 or COMPASS Writing Skills, 070 or AccuPlacer Sentence Skills, 083 or ACT English, 18 or Next Gen AccuPlacer Writing, 255 or SAT Writing, 330 or Writing-Credit Level Met or Test Waived-College Degree or 831-103 or 831-103) and (COMPASS Reading Skills, 073 or AccuPlacer Reading Comp, 076 or ACT Reading, 16 or ASSET Reading Skills, 39 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** 851-795 or (838-104

Complete Course Listing

**801-195 Written Communication****Credits:** 3

Develops writing skills which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through the analysis of a variety of written documents.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Writing Skills, 44 or COMPASS Writing Skills, 070 or ACT English, 18 or AccuPlacer Sentence Skills, 083 or Next Gen AccuPlacer Writing, 255 or SAT Writing, 330 or Writing-Credit Level Met or Test Waived-College Degree or 831-103 or 831-103) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 260 or Reading-Credit Level Met or Test Waived-College Degree or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

**Co-requisites:** 851-795) or 838-104 or 838-104

Complete Course Listing

**801-196 Oral/Interpersonal Communication****Credits:** 3

Focuses upon developing speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities, and other projects.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or SAT Reading, 330 or AccuPlacer Reading Comp, 076 or Reading-Credit Level Met or Next Gen AccuPlacer Reading, 250 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**801-197 Technical Reporting****Credits:** 3

The student will prepare and present oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (801-195 or 801-136 or Test Waived-College Degree)

Complete Course Listing

**801-198 Speech****Credits:** 3

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of the course.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 260 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**801-311 Communication****Credits:** 2

This course reviews the grammar and writing skills that an adult learner needs to write clearly, concisely, and persuasively on the job. Students will produce a variety of job-related documents such as: business memos, letters, and short reports. The course will provide techniques that will improve the effectiveness with which learners communicate interpersonally, and within small groups. Students will learn to prepare and deliver oral presentations.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

## Computer Basics (860)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****860-764 Computer Basics****Credits:** 3

This course covers elementary computer skills such as file management; document formatting, creating and management; using the Internet; basic e-mail and information management.

**Aid Code:** 74 - Interm ABE (6.0-8.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

## Computer Service Tech-Hardware (631)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****631-100 Microcomputer Fundamentals****Credits:** 3

This course covers the program environment and binary functionality of the personal computer. An in-depth look at PC component identification, use, and functions are then observed. The course relies heavily on hands-on construction and preparation of the PC hardware, followed by a review of the technical resources and proper troubleshooting methods. This course incorporates a hands-on lab and performance assessment, where students work with the instructor and one another to perfect their skills.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**631-101 PC Software Fundamentals****Credits:** 3

This course familiarizes the learner with Windows and Linux operating systems, popular business applications, and computer virus eradication. Students will learn how to properly install, use and troubleshoot each operating system and software package – to include software detailing, software utilities, and licensing. This course will help to ready students for the IC3 certification along with the CompTIA A+ certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-100)

Complete Course Listing

**631-102 PC Peripherals and Troubleshooting****Credits:** 3

Students will apply the troubleshooting theory and repair various scenario-based problems involving computer hardware, software, and peripherals. Students will learn about the installation and setup of various computer peripherals, to include (but not limited to) various types of printers, scanners, and digital cameras.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-101) and (631-100)

Complete Course Listing

**631-103 Apple Devices and Operating Systems****Credits:** 3

The Apple Devices & Operating Systems course provides a comprehensive overview of several pieces of Apple hardware and operating systems. Students will learn the installation, configuration, and troubleshooting of the operating systems and hardware. Network installation, configuration, and troubleshooting will also be included.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-112)

Complete Course Listing

**631-104 Cyber Ethics****Credits:** 3

In this course students will examine situations that are considered to be in a "gray" area that many IT specialists face on a daily basis. Students will evaluate the situations presented to them and determine the best action plan based on a set decision-making process.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-111)

Complete Course Listing

**631-105 Helpdesk Fundamentals****Credits:** 3

The student will gain knowledge and experience in applying the techniques used in problem troubleshooting, end-user support and customer service. The student will also become familiar with and apply the tools used in user supply and help desk operations.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 631-112

Complete Course Listing

**631-106 IT Customer Service Fundamentals****Credits:** 3

This course is designed to instruct students on the principles of service calls and customer relations skills needed for success as a field service technician. Practical interviews and role playing are included in this course, with emphasis on phone and electronic support skills based on an Information Technology environment.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing



**631-107 Linux Operating Systems****Credits:** 3

An introduction to Linux desktop and server are covered. Topics include installation, administration, Linux commands, and troubleshooting. The learner will apply previous knowledge to set up a network that combines Linux, Windows, and Apple operating systems. This course prepares students for the CompTIA Linux+ certification.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-123)

Complete Course Listing

**631-108 Manufacturing Communication Protocols****Credits:** 3

This hands-on course focuses on the principles of network data communications. Serial and parallel protocols, network topologies and cabling media will be explored. Time will be spent studying ethernet TCP/IP, CIP, and other industrial protocols such as DeviceNet and ControlNet. Students will configure and troubleshoot networks and discuss the importance of network security.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-138)(631-115 or 620-115) and (631-138)

Complete Course Listing

**631-109 Network Portfolio 1****Credits:** 1

This is the first of two capstone courses for second year students. Students will create a portfolio based on a provided scenario. They will be required to provide items such as wireless assessments of the area, recommend required equipment, provide a Gantt chart, etc based on the knowledge they gained from the first semester. This is an individual project, and students will be able to use the portfolio to show to prospective employers.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-112)**Co-requisites:** (631-150)

Complete Course Listing

**631-110 Network Portfolio 2****Credits:** 1

This is the second course of a two part capstone portfolio project that will require students to add new features, equipment and theories based on the knowledge they have gained throughout the four semesters of the Manufacturing Information Technology Specialist program. Students will be able to apply their knowledge in areas such as Linux operating systems, advanced wireless networking, mobile device and virtual machine fundamentals as would be needed in various scenarios on a manufacturing shop floor. This portfolio will give students an organized record to share with prospective employers their knowledge and skills they have obtained throughout all their courses in this program.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-165)

Complete Course Listing

**631-111 PC Hardware Assessment****Credits:** 1

This is the first of a two part capstone course project that will require students to use the information that they have gained throughout the first semester to collaborate on a group project. Students will be expected to develop a plan to produce a computerized machine by assessing their hardware needs, types of processors, circuit boards and controllers to be used as well as understand budgeting and invoicing procedures. Students will be able to apply this planning phase of the project in the second semester course, PC Hardware Interfacing.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-100 or 631-126) and (631-101 or 631-129) and (631-132)

Complete Course Listing

**631-112 PC Hardware Interfacing****Credits:** 1

This is the second of two part capstone course project that will require students to use information that they have gained throughout the second semester to collaborate on a group project. Students will combine the planning stage in the first semester capstone course, PC Hardware Assessment, to assemble a computerized machine, paying special attention to decision making as it pertains to choosing different operating systems and networking within a larger system. Students will also be expected to incorporate the ideals of Green IT (recycling) and cyber ethics throughout this production project.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-111)

Complete Course Listing

**631-113 Virtual Machine Fundamentals****Credits:** 3

This course is an introduction to virtual machines. Topics include various types of virtual machine software and their installation, administration, usefulness, and troubleshooting, as well as how these apply to IT and manufacturing.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-107) and (631-114) and (631-121)

Complete Course Listing

**631-114 Mobile Device Fundamentals****Credits:** 3

This course first provides students with a hands-on exploration of different mobile device hardware to gain an understanding of their functions. Students will then examine the different operating systems that are used in today's devices. The remaining sections of the course take the student through mobile device management, networking, security, and troubleshooting.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-107)

Complete Course Listing



**631-115 Network Fundamentals****Credits:** 3

This course covers the basic theories and technologies involved in Local Area Networks (LAN) and Wide Area Networks (WAN). Students gain knowledge in cabling schemes, specific hardware and software types, protocols and OSI layers. Both the physical and logical aspects of networks will be studied, giving students the ability to apply basic entry level technician skills in common office environments and manufacturing LANs.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-111)

Complete Course Listing

**631-116 Troubleshooting Shared Network Resources****Credits:** 3

This course is designed to prepare the network technician for a variety of networked environments and focuses on the installation, configuration, and troubleshooting of network operating systems and network hardware. Security, resource sharing, cable installation, and troubleshooting are emphasized. The student will also create a basic network diagram and peer to peer network utilizing the operating systems installed on their lab PC.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-115)

Complete Course Listing

**631-118 Green IT****Credits:** 3

Green IT covers the history of the American Green Movement and definitions. We then examine policies and regulations, recycling laws and methods. We next examine how to make the data center, the office, and the organization "green," and what tools we can use to do this. Finally, the students are required to employ everything that they have learned and apply it by developing a plan for a scenario-based issue.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**631-119 Wireless Networking 1****Credits:** 3

This course introduces the student to wireless fundamentals. As a hands-on course, students will cover basic wireless installation, implementation, and troubleshooting for various types of wireless networks. Some topics that will be discussed are RF Basics, wireless networking devices, and the 802.11 standard. This course will help prepare students for the CWTS (Certified Wireless Technology Specialist) certification.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-103)

Complete Course Listing

**631-120 Ind Computer Applications****Credits:** 3

The Industrial Computer Applications course is designed to meet the need for foundational computer training in industrial occupations. Using a self-paced, modular format, the ICA course is flexible to meet the needs of students with varying backgrounds in computer usage. Topics covered include: PC parts identification (including communications ports), operating system usage, file management, word processing, spreadsheet usage, and Internet usage.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**631-121 Wireless Networking 2****Credits:** 3

The Wireless Networking 2 course builds from the knowledge gained in Wireless Networking 1. The hands-on learning continues as students will focus on advanced RF Technologies, learn regulations and standards, implement network security, and perform a wireless network survey and install, as well as configure a building-wide wireless network. This course will help prepare students for the CWNA (Certified Wireless Network Administrator) certification.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 631-119

Complete Course Listing

**631-122 Service Support Techniques****Credits:** 1

This internship-style course provides an opportunity for the student to experience on the job training in which they will be able to apply concepts, principles and skills gained throughout the Computer Service Technician program. Students will engage in on the job training in areas such as installing operating systems, troubleshooting hardware and software issues, as well as reconfiguring small and large networking systems. Students will gain the practical knowledge necessary to be able to work collaboratively and apply their knowledge in the workplace.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-112)

Complete Course Listing

**631-123 Malicious Software Fundmtls****Credits:** 3

Students will be introduced to various types of malicious software found throughout the Information Technology industry that infect various types of equipment. Through this course, they will be able to analyze malicious software, understand its functionality, and engage in removing the malicious software from several types of operating systems and machines.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**631-124 Microcomputer Fundamentals: PC Components****Credits:** 1

This course covers an in-depth look at PC component identification, use, and functions. Students will employ various methods to help learn this criteria and skills.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**631-125 Microcomputer Fundamentals 2: PC Assembly****Credits:** 1

The course relies heavily on hands-on construction and preparation of the PC hardware, followed by a review of the technical resources. This course incorporates a hands-on lab and performance assessment, where students work with the instructor and one another to perfect their skills.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-124)

Complete Course Listing

**631-126 Microcomputer Fundamentals 3: Intro to Web Programming****Credits:** 1

This course is designed to provide the student with an introduction into foundational web programming knowledge and skills. The student will learn to plan, design, construct, and integrate basic web sites using HTML5 and CSS.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-125)

Complete Course Listing

**631-127 PC Software Fundamentals 1: Operating Systems****Credits:** 1

This course familiarizes the learner with Windows and Linux operating systems. Students will learn how to properly install and use each operating system to include software detailing, software utilities, and licensing. This course will help to ready students for the IC3 certification along with the CompTIA A+ certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-126)

Complete Course Listing

**631-128 PC Software Fundamentals 2: Software Applications****Credits:** 1

This course familiarizes the learner with popular business applications and computer virus eradication. Students will learn how to properly install and use each software package. This course will help to ready students for the IC3 certification along with the CompTIA A+ certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-127)

Complete Course Listing

**631-129 PC Software Fundamentals 3: Troubleshooting Operating Systems****Credits:** 1

This course familiarizes the learner with operating system and application software troubleshooting methods. This course will help to ready students for the IC3 certification along with the CompTIA A+ certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-128)

Complete Course Listing

**631-130 PC Peripherals and Troubleshooting 1: Peripherals****Credits:** 1

Students will learn about the installation and setup of various computer peripherals, to include (but not limited to) various types of printers, scanners, and digital cameras.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-129)

Complete Course Listing

**631-131 PC Peripherals and Troubleshooting 2: Printers & Laptops****Credits:** 1

Students will apply the troubleshooting theory and gain repair knowledge by reviewing laptops and printer hardware and software. Students will be required to disassemble and re-assemble working laser printers and laptops.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-130)

Complete Course Listing

**631-132 PC Peripherals and Troubleshooting 3: Troubleshooting Hardware****Credits:** 1

Students will apply the troubleshooting theory and repair various scenario-based problems involving computer hardware, software, and peripherals.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-131)

Complete Course Listing

**631-133 IT Customer Service Fundamentals 1****Credits:** 1

This course is designed to instruct students on the principles of service calls and customer relations skills needed for success as a professional IT service technician. Practical interviews and role playing are included in this course, with emphasis on phone and electronic support skills based on an Information Technology environment.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**631-134 IT Customer Service Fundamentals 2****Credits:** 1

This course continues to instruct students on the principles of service calls and customer relations skills needed for success as a professional IT service technician. There is a heavy emphasis on business skills and working in teams in an Information Technology environment.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-133)

Complete Course Listing

**631-135 IT Customer Service Fundamentals 3****Credits:** 1

The student will gain knowledge and experience in applying the techniques used in problem troubleshooting, end-user support and customer service. The student will also become familiar with and apply the tools used in user supply and help desk operations.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-134)

Complete Course Listing

**631-136 Network Fundamentals 1****Credits: 1**

This course covers the basic theories and technologies involved in Local Area Networks (LAN) and Wide Area Networks (WAN). Students gain knowledge in cabling schemes, specific hardware and software types, protocols and OSI layers. Both the physical and logical aspects of networks will be studied, giving students the ability to apply basic entry level technician skills in common office environments and manufacturing LANs.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-111)

Complete Course Listing

**631-137 Network Fundamentals 2****Credits: 1**

This course is a continuation of the basic theories and technologies involved in Local Area Networks (LAN) and Wide Area Networks (WAN). Students will continue to gain knowledge in cabling schemes, specific hardware and software types, protocols and OSI layers. Both the physical and logical aspects of networks will be studied, giving students the ability to apply basic entry level technician skills in common office environments and manufacturing LANs.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-136)

Complete Course Listing

**631-138 Network Fundamentals 3****Credits: 1**

This course is a culmination of the basic theories and technologies involved in Local Area Networks (LAN) and Wide Area Networks (WAN). Students will apply the gained knowledge in cabling schemes, specific hardware and software types, protocols and OSI layers. Both the physical and logical aspects of networks will be studied, giving students the ability to apply basic entry level technician skills in common office environments and manufacturing LANs.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-137)

Complete Course Listing

**631-139 Troubleshooting Network Resources 1****Credits: 1**

This course is designed to prepare the network technician for a variety of networked environments and focuses on the installation, configuration, and troubleshooting of network operating systems and network hardware. Security, resource sharing, cable installation, and troubleshooting are emphasized. The student will also create a basic network diagram and peer to peer network utilizing the operating systems installed on their lab PC.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-138)

Complete Course Listing

**631-140 Troubleshooting Network Resources 2****Credits: 1**

This course introduces network monitoring tools and techniques. Troubleshooting theory and methods will also be revisited and reinforced to help prepare the future network technician.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-139)

Complete Course Listing

**631-141 Troubleshooting Network Resources 3****Credits: 1**

This course is a culmination of the competencies learned throughout the series. Students will use knowledge gained to develop, configure, and troubleshoot network operating systems and network hardware.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-140)

Complete Course Listing

**631-142 Cyber Ethics 1****Credits: 1**

In this course students will examine situations that are considered to be in a "gray" area that many IT specialists face on a daily basis. Students will evaluate the situations presented to them and determine the best action plan based on a set decision-making process. Ethics and computer crime will be studied.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**631-143 Cyber Ethics 2****Credits: 1**

In this course students will continue to examine situations that are considered to be in a "gray" area that many IT specialists face on a daily basis. Students will evaluate the situations presented to them and determine the best action plan based on a set decision-making process. Main areas of study will include: Intellectual property, Privacy, freedoms, and software development.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-142)

Complete Course Listing

**631-144 Cyber Ethics 3****Credits: 1**

In this course students will continue to examine situations that are considered to be in a "gray" area that many IT specialists face on a daily basis. Students will evaluate the situations presented to them and determine the best action plan based on a set decision-making process. Main areas of study will include: The ethical impact on IT and organization and social networking.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-143)

Complete Course Listing

**631-145 Apple Devices and Operating Systems 1: Hardware****Credits:** 1

The Apple Devices & Operating Systems course provides a comprehensive overview of several pieces of Apple hardware and operating systems. Students will learn the installation, configuration, and troubleshooting of Apple hardware.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-157)

Complete Course Listing

**631-146 Apple Devices and Operating Systems 2: Operating Systems****Credits:** 1

The Apple Devices & Operating Systems course provides a comprehensive overview of several pieces of Apple hardware and operating systems. Students will learn the installation, configuration, and troubleshooting of the operating systems and software.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-145)

Complete Course Listing

**631-147 Apple Devices and Operating Systems 3: Networking****Credits:** 1

The Apple Devices & Operating Systems course provides a comprehensive overview of several pieces of Apple hardware and operating systems. Students will learn the installation, configuration, and troubleshooting of the operating systems and hardware. This course covers Apple network installation, configuration, and troubleshooting.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-146)

Complete Course Listing

**631-148 Wireless Networking 1****Credits:** 1

This course introduces the student to wireless fundamentals. As a hand-on course, students will cover basic wireless installation, implementation, and troubleshooting for various types of wireless networks. Some topics that will be discussed are RF Basics, wireless networking devices, and the 802.11 standard. This course will help prepare students for the CWTS (Certified Wireless Technology Specialist) certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-147)

Complete Course Listing

**631-149 Wireless Networking 2****Credits:** 1

This course continues the introduction to wireless fundamentals. As a hand-on course, students will cover basic wireless installation, implementation, and troubleshooting for various types of wireless networks. Some topics that will be discussed are RF Basics, wireless networking devices, and the 802.11 standard. This course will continue to help prepare students for the CWTS (Certified Wireless Technology Specialist) certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-148)

Complete Course Listing

**631-150 Wireless Networking 3****Credits:** 1

This course continues the introduction to wireless fundamentals by implementing advanced wireless topics. As a hand-on course, students will cover WLAN site surveys and troubleshooting for various types of wireless networks. This course will continue to help prepare students for the CWTS (Certified Wireless Technology Specialist) certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-149)

Complete Course Listing

**631-151 Manufacturing Networking 1****Credits:** 1

This course focuses on the principles of network data communications. Serial and parallel protocols, network topologies and cabling media will be explored. Time will be spent studying ethernet and the TCP/IP protocol.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-115)

Complete Course Listing

**631-152 Manufacturing Networking 2****Credits:** 1

This hands-on course focuses on the principles of network data communications. Students will configure and troubleshoot networks and discuss the importance of network security.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-151)

Complete Course Listing

**631-153 Manufacturing Networking 3****Credits:** 1

This hands-on course focuses on the principles of network data communications. Serial and parallel protocols, network topologies and cabling media will be explored. Students will create ethernet cables and install network cable in various areas.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-152)

Complete Course Listing

**631-154 Wireless Networking Implementation 1****Credits:** 1

This course builds from the knowledge gained in the Wireless Networking courses. The hands-on learning continues as students will focus on advanced RF Technologies, learn regulations and standards, and implement network security using a small home/office WAP. This course will continue to help prepare students for the CWTS (Certified Wireless Technology Specialist) certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-109)

Complete Course Listing

**631-155 Wireless Networking Implementation 2****Credits:** 1

The course continues to build from the knowledge previously gained in Wireless Networking courses. The hands-on learning continues as students will focus on advanced RF Technologies, learn regulations and standards, implement network security, complete wireless surveys, as well as configure a building-wide wireless network. This course will continue to help prepare students for the CWTS (Certified Wireless Technology Specialist) certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-154)

Complete Course Listing

**631-156 Wireless Networking Implementation 3****Credits:** 1

The course continues to build from the knowledge previously gained in Wireless Networking courses. The hands-on learning continues as students will focus on advanced RF Technologies, learn regulations and standards, implement network security, complete advanced wireless surveys, and configure a wireless network within a manufacturing lab for manufacturing equipment. This course will continue to help prepare students for the CWTS (Certified Wireless Technology Specialist) certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-155)

Complete Course Listing

**631-157 Linux Operating Systems 1****Credits:** 1

An introduction to Linux desktop is covered. Topics include installation, administration, Linux commands, and troubleshooting. This course prepares students for the CompTIA Linux+ certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-156)

Complete Course Listing

**631-158 Linux Operating Systems 2****Credits:** 1

This is an advanced course that is a continuation of the previous Linux desktop course. Advanced topics include configuration, administration, Linux commands, and troubleshooting. This course prepares students for the CompTIA Linux+ certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-157)

Complete Course Listing

**631-159 Linux Operating Systems 3****Credits:** 1

This course will have the learner apply previous and newly gained knowledge to set up a Linux network that could include Windows, and Apple operating systems. This course prepares students for the CompTIA Linux+ certification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-158)

Complete Course Listing

**631-160 Malicious Software Fundamentals 1****Credits:** 1

Students will be introduced to various types of malicious software found throughout the Information Technology industry that infect various types of equipment. Through this course, they will be able to analyze malicious software, understand its functionality, and engage in removing the malicious software from several types of operating systems and machines.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**631-161 Malicious Software Fundamentals 2****Credits:** 1

Students will learn what the building block of various types of malicious software. Through this course, they will be able to analyze malicious software, understand its functionality, and engage in removing the malicious software from several types of operating systems and machines.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-160)

Complete Course Listing

**631-162 Malicious Software Fundamentals 3****Credits:** 1

Students will be introduced to various types of malicious software found throughout the Information Technology industry that infect various types of equipment. Through this course, they will be able introduced to cryptography. They will learn the definition, and how it's used throughout the industry.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-161)

Complete Course Listing

**631-163 Mobile Device Fundamentals 1****Credits:** 1

This course first provides students with a hands-on exploration of different mobile device hardware to gain an understanding of their functions. Students will then examine the different operating systems that are used in today's devices.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-159)

Complete Course Listing

**631-164 Mobile Device Fundamentals 2****Credits:** 1

This is a continuation course that will provide students with a hands-on exploration of different mobile device hardware to gain an understanding of their functions. Students will then examine the different operating systems that are used in today's devices.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (631-163)

Complete Course Listing

**631-165 Mobile Device Fundamentals 3****Credits:** 1

This course provides students with a hands-on exploration of mobile device management, networking, security, and troubleshooting.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (631-164)

Complete Course Listing

## Computer Service Technician (450)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
**Academic Programs (p. 22).**

**450-315 Customer Service Fundamentals****Credits:** 2

This course is designed to instruct students on the principles and customer relations skills needed for the successful field service technician. Practical interviews and role playing are included in this course.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**450-316 Microcomputer Software Service****Credits:** 2

This course covers a number of different software topics: familiarization with popular business applications, computer virus eradication – to include malware and spyware, software detailing, software utilities, and licensing.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Computer Service Technician Program.

**Co-requisites:** 631-100

Complete Course Listing

**450-317 Troubleshooting Microcomputers****Credits:** 2

This course culminates the three core courses and the two previous Hardware Support courses in an advanced diagnosis and repair course that, on completion, will mark the achievement of the Computer Hardware Support Certificate for the learner. Hands-on PC troubleshooting skills are emphasized.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Computer Service Technician Program.

**Co-requisites:** (450-316) and (631-100) and (631-101) and (631-102)

Complete Course Listing

**450-319 Microcomputer Peripherals****Credits:** 2

This course focuses on printers, the specialized functions of various kinds of printers, and printer troubleshooting. Digital input and data protection devices will also be examined.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Computer Service Technician Program.

**Pre-requisites:** (450-316) and (450-317) and (631-100) and (631-101) and (631-102)

Complete Course Listing

**450-321 Troubleshooting Network Hardware****Credits:** 2

This course covers network hardware installation, configuration and troubleshooting in both peer-to-peer and server-based environments, cable installation, certification, and troubleshooting is emphasized. Wireless networking is also utilized.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Computer Service Technician Program.

**Pre-requisites:** (450-316) and (450-317) and (631-100) and (631-101) and (631-102)

**Co-requisites:** (450-319) and (450-320) and (631-115)

Complete Course Listing

**450-322 Service Support Techniques****Credits:** 1

This course provides an opportunity to apply concepts, principles and skills learned in the CST program in the workplace. Emphasis is placed on applying skills to job tasks, modeling core abilities and seeking a job.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Computer Service Technician Program.

**Pre-requisites:** (450-315) and (450-316) and (450-317) and (631-100) and (631-101) and (631-102)

**Co-requisites:** (450-319) and (450-320) and (450-321) and (631-115) and (631-116) and (631-117) or (631-118)

Complete Course Listing

## Computer Software (103)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
**Academic Programs (p. 22).**



**103-106 Introduction to Microsoft Office Suites****Credits:** 3

This course will introduce students to the Microsoft Office Suite software and overview many of the core competencies of Word, Excel, PowerPoint, and Access. Students will use technology for both problem solving and decision making and will be expected to use the resources available to search for answers to problems. Knowledge of creating and saving a document to a specific drive, open and closing multiple applications, locating a website using the URL and sending or receiving an e-mail with an attachment plus touch keyboarding skills are expected. If you are not proficient in these skills then Keyboarding 106-140 and Intro to Computer Basics 103-127 are highly recommended pre/corequisites for this course. These recommended pre/corequisites may also be taken concurrently with the Introduction to Microsoft Suites course. This course is taught using MS Office 2013. All assignments and assessments must be submitted using MS Office 2013.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-107 Intermediate Excel****Credits:** 2

This course introduces intermediate level features of Microsoft Excel that allows students to advance their skill set by learning to work with advanced formulas, lists, and illustrations and to use spreadsheets to compile, analyze and present data for problem solving and decision making within organizations.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-108 Introduction to Microsoft Outlook****Credits:** 1**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-110 Introduction to Microsoft Windows****Credits:** 1

In this course, the learner will become familiar with the basic features of the Microsoft Windows operating system. Competencies covered include: working with the Start button and taskbar, opening, closing, moving and resizing windows; and saving and managing files.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-112 Introduction to Microsoft Excel****Credits:** 1

Using Microsoft Excel, students will learn the elements of a spreadsheet: worksheet capabilities (create, modify, enhance, save, print, and erase worksheets), and graphing capabilities (create graphs, bar charts, and pie charts).

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-114 Introduction to Internet Explorer****Credits:** 1**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-116 Introduction to Microsoft Word****Credits:** 1

Learn to use Microsoft Word as a word processor to create documents such as reports, letters and research papers. Students create, edit, format and print a variety of business and school documents and become proficient with editing tools such as spelling and grammar checkers, Thesaurus, and AutoCorrect. Successful completion of Introduction to Microsoft Office (103-106) will be accepted in lieu of this course.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-117 Introduction to Microsoft Access****Credits:** 1

This course introduces you to Microsoft Access. Access is a collection of one or more tables that can share information. It will include database applications, managing, retrieving, sorting and analyzing information to generate reports. .

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-120 Introduction to Microsoft PowerPoint****Credits:** 1**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-126 Introduction to QuickBooks****Credits:** 1

This course is designed to provide the user with a basic level of proficiency in the popular Quickbooks software. Quickbooks is used to record business transactions and produce financial statements and various other reports for management. A working knowledge of Microsoft Windows and a basic knowledge of the accounting cycle are recommended.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-127 Introduction to Computer Basics****Credits:** 1

This class is an introductory course for those with little or no computer skills or for those who want to brush up on general computer proficiency. You will become familiar with MS Windows operating system, file management, MS Outlook and Internet Explorer. This class is highly recommended prior to taking Intro to MS Office Suites (103-106) or any other computer software courses.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-128 Introduction to Microsoft Office Suites****Credits:** 2

This course will introduce students to the Microsoft Office Suite software and overview many of the core competencies of Word, Excel, and PowerPoint. Students will use technology for both problem-solving and decision-making and will be expected to use the resources available to search for answers to problems. Knowledge of creating and saving a document to a specific drive, opening and closing multiple applications, locating a website using the URL and sending or receiving an e-mail with an attachment are expected. This course is taught using MS Office 2016. All assignments and assessments must be submitted using MS Office 2016.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-129 Intro to MS Publisher & Desktop Publishing****Credits:** 1

Intro to MS Publisher & Desktop Publishing introduces the learner to a desktop publishing program that can be used to create a variety of workplace publications. Using Publisher, you can easily create business cards, greeting cards, calendars, newsletters and much, much more.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-131 Intro to Digital Photography & Color****Credits:** 1

The Intro to Digital Photography & Color will have students examining photographic principles and file manipulation. Through discussions, audio visuals, camera demonstrations, and in-the-field shooting sessions, the individual will learn specific shooting and lighting techniques designed to capture a better image. Students will also engage in and produce products through printing, cropping, retouching and create a file management system.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-132 Intro to Adobe Illustrator & Typography****Credits:** 1

Intro to Adobe Illustrator & Typography prepares the learner to use Adobe's Illustrator software to create digital art. The course will cover the basics of computer illustration and its use in print and web media. Learners will work with objects, the pen, brushes, text, color, special effects, symbols, and gradients as they create portfolio-quality art. The learner will be introduced to the fundamentals of Typography. Emphasis is on the structure and form of type and how it is used in contemporary graphic design. Projects explore the history of type, and the creation of design using type elements.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-133 Intro to Photoshop - Designing and Editing****Credits:** 1

Intro to Adobe Photoshop - Designing and Editing introduces the learner to using Adobe Photoshop to edit, enhance, and combine digital images which are prepared for print and web media. Topics will include photo correction, masks, channels, page backgrounds, brushes and optimizes images for web use.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-134 Intro to InDesign & Layout****Credits:** 1

Intro to InDesign & Layout prepares the learner to use a professional page layout program. Learners will develop brochures, mailers, business documents and newsletters by implementing text layout techniques, using multiple master pages, managing styles, using text adjustment tools, working with libraries, and managing long documents for print production.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-135 Dreamweaver 1****Credits:** 1

In Dreamweaver 1, learners are introduced to Adobe Dreamweaver and to basic web design skills by completing several exercises and creating basic web sites.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 201-102 and 104-124

Complete Course Listing

**103-136 Dreamweaver 2****Credits:** 1

In Dreamweaver 2, students will continue to examine and apply website design concepts and Adobe Dreamweaver while integrating marketing and graphic design principles to increasingly complex projects.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 103-135

Complete Course Listing

**103-137 Dreamweaver 3****Credits:** 1

In Dreamweaver 3, learners demonstrate their mastery of website in conjunction with effective web marketing skills by designing and completing complex projects.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 103-136

Complete Course Listing

**103-138 Word Documents****Credits:** 2

This course introduces the learner to the core competencies of MS Word and PowerPoint. Using Word, learn to enter, edit, and format text, save documents in various formats, move and copy data, create/ modify tables, insert and modify graphics, proof and print documents. Using PowerPoint, learn to create new presentation, format slides, use drawn objects, work with graphics, use tables and charts, modify presentation, work with the slide masters, and proof and deliver a presentation.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-178 Advanced Microsoft Excel****Credits:** 2

This course covers advanced features of Microsoft Excel such as what if analysis, input tables, spreadsheet consolidation, data tables and queries, object linking and embedding, filters and pivot tables, macros, Visual Basic for Applications, and charting features.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-105 or 103-107)

Complete Course Listing

**103-195 Intro to Blackboard LMS****Credits:** 1

The basics of the Blackboard Learning Management System are covered in this course. Topics include customizing both the student and instructor views, creating, loading and editing content, user management, assessment options, creating assessments, managing the online grade book, Using discussion boards, tracking student activities, archiving, copying, exporting and importing content and site management, design and security. The project is this course is to begin using some of the Blackboard features for one or more of your online or face-to-face courses.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-196 Advanced Blackboard LMS****Credits:** 1

This course focuses on advanced features of the Blackboard Learning Management System. Topics include using the assignment feature, creating and using test pools, creating an effective assessment, making changes in the online grade center, using the adaptive release feature to individualize the course for students, customizing a course through use of the course settings and images, creating and deploying a survey and finding sources of learning objects and other materials to enhance a Blackboard course. The course also covers basic use of the plagiarism prevention solution adopted by the college. The project is this course is to begin using some of the advanced Blackboard features for one or more online or face-to-face course.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**103-197****Credits:** 1

This course prepares the learner to incorporate the use of the Blackboard Content Collection into their course materials in Blackboard. The final assessment will require the learner to modify one of their Blackboard shells to use the Content Collection for storage of files instead of storing them locally in that course.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

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**Criminal Justice (504)****Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****504-145 Spanish for Emergency Personnel****Credits:** 3

This course is designed to enable students with minimal or no Spanish language skills to communicate effectively with Spanish speaking individuals. Designed for Law Enforcement, Fire and EMS students and professionals, the course presents basic conversational Spanish to apply in the field. This course includes interpretation in basic field interview, traffic investigations, medical emergencies, identification of subjects, and preliminary investigations.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-301 Policing In America****Credits:** 1

This course contains modules: Professional Orientation, Policing in a Free Society. Ethics, Policing in a Free Society, Community Resources, Cultural Competence and Agency Policy.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-302 The Legal Context****Credits:** 2

This course contains modules: Crimes and Juvenile Law.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-303 Tactical Skills****Credits:** 3

This course contains modules: DAAT, Firearms, Tactical Response and Hazardous Materials.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-304 Relational Skills****Credits:** 3

This course contains modules: Report Writing, Professional Communication Skills, Crisis Management, Testifying in Court, Critical Thinking & Problem Solving and Policing Strategies.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-305 Patrol Procedures****Credits:** 4

This course contains modules: Traffic Law Enforcement, Scene Management, EVOC, Vehicle Contacts, OMVWI/SFST, First Aid and CPR/AED.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-306 Investigations****Credits:** 2

This course contains modules: Interview and Interrogation, Physical Evidence Collection, Victims, Domesticity, Sexual Assault and Child Maltreatment.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-307 Scenario Evaluation****Credits:** 1

Through classroom lecture, and on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Phase II topics of the Department of Justice 720 Academy curriculum framework: Ethics II: Moral Reasoning and Professional Responsibility, Cultural Competence II: Fair and Impartial Policing, Victims, Sexual Assault, Child Maltreatment, Interrogations, Testifying in Court, and Crimes III.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-308 Applications of Investigation****Credits:** 2

Through classroom lecture, and on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Phase II topics of the Department of Justice 720 Academy curriculum framework: Ethics II: Moral Reasoning and Professional Responsibility, Cultural Competence II: Fair and Impartial Policing, Victims, Sexual Assault, Child Maltreatment, Interrogations, Testifying in Court, and Crimes III.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-309 Applications of Traffic Response****Credits:** 2

Through classroom lecture, and on-campus lab, students will learn and apply skills addressed in the following Phase III topics from the WI Department of Justice 720 Academy curriculum framework: Traffic Law Enforcement - Core and Radar, Traffic Crash Investigations & Incident Management, Operating a Motor Vehicle While Intoxicated (OMVWI), Standardized Field Sobriety Tests (SFST), and Report Writing. A Phase II Written Examination will also be administered in this course.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-310 Health and Fitness****Credits:** 1

Through classroom lecture and on-campus lab students will apply Phases I-III Health Fitness WI Department of Justice 720 Academy curriculum framework program requirements.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-311 Overview of Criminal Justice****Credits:** 1

Through classroom lecture and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following WI Department of Justice 720 Academy Phase I curriculum framework topics: Academy Orientation, Fundamentals of Criminal Justice, Ethics, Cultural Competency, Agency Policy, and Professional Communication.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-312 Overview of Investigations****Credits:** 2

Through classroom lecture, on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase I topics: Constitutional Law I, Crimes I, Juvenile Law I, Interviews, Report Writing, and Physical Evidence.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-313 Overview of patrol Response****Credits:** 2

Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following WI Department of Justice 720 Academy curriculum framework Phase I topics: Critical Thinking and Decision-Making, Basic Response (RESPOND), Radio Procedures, Introduction to TraCS, Traffic Law Enforcement, and First Aid/CPR/AED. This course will also include the WI DOJ 720 Academy Integration Exercises.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-314 Overview of Tactics****Credits:** 1

Through classroom lecture, and on-campus lab and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase I topics: Fundamentals of Firearms, Vehicle Contacts I, Officer Wellness, and DAAT. The DOJ Phase I Written Examination will be administered in this course.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-315 Principle of Emergency Vehicle Response****Credits:** 2

Through classroom lecture, and on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase II topics: Emergency Vehicle Operation and Control (EVOC) and Vehicle Contacts II.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-316 Principles of Investigation****Credits:** 2

Through classroom lecture, and on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Phase II topics of the WI Department of Justice 720 Academy curriculum framework: Constitutional Law II, Crimes II, Domestic Violence, and Report Writing.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-317 Principles of Patrol Response****Credits:** 2

Through classroom lecture, and on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following WI Department of Justice 720 Academy curriculum framework Phase II topics: Professional Communication Skills II, Incident Command Systems and NIMS, Hazardous Materials and WMD, Tactical Response, Crisis Management, and Tactical Emergency Casualty Care.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-318 Principles of Tactics****Credits:** 3

Through classroom lecture and on-campus lab students will learn and apply skills addressed in the following Phase II topics from the Department of Justice 720 Academy curriculum frameworks: DAAT and Firearms II. The Phase II Written Examination will be administered during this course.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**504-905 Report Writing****Credits:** 3

In this course, the learner will explain the context of report writing, take effective field notes, organize information in reports, write narratives, describe what information should be included in certain types of reports, prepare for court, describe how to be an effective witness, and testify as a witness in court.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (504-900 or 504-100) and (504-903 or 504-118) and (504-902 or 504-121) and (504-901 or 504-136) and (801-195 or 801-136)

Complete Course Listing

**504-907 Community Policing Strategies****Credits:** 3

In this course, the learner will identify community resources available in your area, describe the role of an advocacy group in the criminal justice community, explain the rewards and challenges that diversity brings to and causes in society, evaluate communication barriers in dealing with the public, respond to hate crimes, identify the types of situations and the characteristics of individuals that are likely to be encountered in crisis management situations, apply Wisconsin statutory requirements and general guidelines regarding emergency detentions and emergency protective placements of persons, identify key concepts and elements associated with law enforcement response to people in crisis, apply crisis intervention principles and techniques, articulate the decision-making process taken to manage persons in crisis, describe community-oriented policing, describe problem-oriented policing, describe other policing strategies, and apply principles of crime prevention.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-910 Introduction to Corrections****Credits:** 3

A multidisciplinary study of corrections from the early 1800's to the present. The course provides an overview of significant studies relating to the role of corrections and the methods of community treatment. The course also includes a thorough analysis of current model and practices in the correctional field. This course focuses on the roles of corrections of offenders and society. It starts with a historical and philosophical view of the development of corrections (post-adjudication processing of criminal offenders) focusing on adult offenders. Later topics include administrative and operational components of corrections, criminals in confinement, post-adjudication procedures and problems, and community corrections.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-911 Peacekeeping in a Diverse Society****Credits:** 3

This course examines current issues related to the administration of justice in a culturally diverse society. Special focus of this course will be on the changing ethnicity of communities and related changes in social and institutional public policy. Also discussed is cross cultural communication, implementing cultural awareness training, multicultural representation in law enforcement, and criminal justice interaction with various racial and ethnic groups.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-915 Issues in Criminal Justice****Credits:** 3

This course is designed to review the various functions and current issues related to various components of the criminal justice system.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-917 Course Title Internship 2****Credits:** 3

This elective course involves criminal justice students providing basic security service on campus to assist in providing a safe campus environment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** Need Dean Approval  
Complete Course Listing**504-918 Career Explore Criminal Justice****Credits:** 1

This one credit elective course focuses on the exploration of personal professional goal setting and exploring the many career paths available in criminal justice system. Students will develop a personal career development plan to help guide them in attaining their personal and professional goals.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-919 Fitness, Nutrition Criminal Justice****Credits:** 1

The course focuses on the importance of fitness and nutrition as it relates not only to the criminal justice profession but also to the individual's overall wellness. Also explored are the common physical agility testing requirements many departments use in the hiring process. Students will develop an overall wellness/fitness plan.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-920 Emergency Dispatch****Credits:** 3

This course covers the topics found in the Emergency Telecommunicator Course developed by National Academies of Emergency Dispatch (NAED). It is designed to train students in the following: Emergency telecommunication technologies, caller management, legal aspects of public safety, radio broadcast procedures, medical, police and fire call classification. The course also incorporates Basic and Mobile Certification Training (BMCT). This training provides telecommunications students the skills to interpret and explain TIME system reports. These reports are generated by the state Department of Transportation (DOT), Crime Information Bureau (CIB) and National Crime Information Center (NCIC). The training will explain and illustrate to students how to perform queries from these agencies, interpret the information and relay it back to the emergency responder. After completing this course the student will complete examinations in both NAED and BMCT for certification through both agencies.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-921 Drugs, Society, Criminal Justice****Credits:** 3

This course examines the social origins and consequences of the use and abuse of consciousness-altering substances (including alcohol). It considers how society defines and deals with drug use and assesses social harm, including such issues as addictions and health effects, drugs and crime, the legislation debate, and drug policy and enforcement.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-922 The Criminal Justice System****Credits:** 3

This introductory course is an in-depth exploration of each step of the criminal justice process from investigation through adjudication. Also explored is the history, primary functions and jurisdictions of law enforcement agencies. The levels and functions of the court systems in America are distinguished. The role of belief systems, social systems, moral problems, and diversity and ethical decision making are discussed.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-923 Criminal Procedure****Credits:** 3

This course explores the history and development of criminal procedural law with the Bill of Rights as the foundation. Students will analyze constitutional procedures for detention/arrest, search & seizure, and legally obtained statements by examining related court decisions.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-924 Substantive Criminal Law****Credits:** 3

This course discusses the creation and application of substantive criminal law. Includes the nature and origins of criminal law, elements of criminal liability, the doctrine of complicity, uncompleted crimes, defenses to criminal liability, and the elements of crimes against persons, habitation, property and public order.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-925 Interview and Interrogation****Credits:** 3

This course familiarizes the student with the various components of everyday professional communication as well as effective interviewing of victims, witnesses, and suspects.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-926 Juvenile Justice System****Credits:** 3

In this course, learners will describe ways in which the juvenile justice system fits into the criminal justice system (Law Enforcement, Court, Corrections) as a whole. Historical perspectives, theories of delinquency, application of best practices, and current trends will be discussed and applied throughout this course.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing



**504-927 Introductory Report Writing****Credits:** 3

This course is designed to supply the student with a working knowledge of the purposes and the acceptable principles of criminal justice report writing. Attention is given to the improvement of spelling, sentence structure, punctuation, and vocabulary. Emphasis is placed on the report narrative as a powerful investigative tool and its position in the criminal justice system.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (801-195 or 801-136)

Complete Course Listing

**504-928 Criminal Investigation Strategies****Credits:** 3

Students will be exposed to common investigative strategies for the initial responding officer when handling crimes related to domestic violence, sexual assault, death, and crimes against children. Effectively dealing with victims of crime is also emphasized.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-929 Policing and Crime Prevention****Credits:** 3

This course will examine the role and effectiveness of the police in controlling crime in our communities. We will explore the theoretical relationship between communities and crime and we will examine the relative effectiveness of community policing, problem-oriented policing, and various street-level approaches to crime prevention and crime control.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**504-938 Patrol Procedures****Credits:** 3

Students learn and incorporate knowledge, skills and attitudes necessary for effective police field services. The course addresses effective communication on the street, methods of enforcement and statutes related to traffic law enforcement, responding to crimes in progress, and initial responsibilities of patrol officers.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Criminal Justice-Law Enforce, Criminal Justice Studies Programs.

Complete Course Listing

**504-939 Juvenile Offenders and Family****Credits:** 3

In this course learners will understand and describe how juvenile offenders depend on their families and community resources in order to lead a crime free lifestyle. Historical perspectives, theories on delinquency, application of best practices, and current trends will be discussed and applied throughout this course.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Criminal Justice-Law Enforce, Criminal Justice Studies Programs.

Complete Course Listing

**504-940 Juvenile Residential Services****Credits:** 3

In this course, students will learn all aspects of voluntary and court ordered placements of juvenile offenders in residential, detention and correctional facilities. Staffing, operations and politics of both public and private agencies will be discussed, focusing on treatment versus punishment and detention issues.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Criminal Justice-Law Enforce, Criminal Justice Studies Programs.

Complete Course Listing

**504-941 Community Corrections****Credits:** 3

This course will provide an overview of the history and philosophy of probation and parole. Also included is the organization and operation of probation and parole agencies as particular segments of the criminal justice system. A review and evaluation of the state of our prisons and their relationship to probation and, particularly, parole is included. The various roles of probation and parole officers and a review of community corrections in managing offender treatment, rehabilitation and reintegration are covered in this course.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Criminal Justice-Law Enforce, Criminal Justice Studies Programs.

Complete Course Listing

**504-942 Juvenile Justice Internship****Credits:** 3

This course consists of field experience in one of several juvenile correctional environments that could involve group homes, juvenile diversion, secure detention or a combination thereof.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Criminal Justice-Law Enforce, Criminal Justice Studies Programs.**Pre-requisites:** (504-931) and (504-932)**Co-requisites:** (504-933) or (504-912) or (504-119)

Complete Course Listing

**504-950****Credits:** 3

Students will explore the applications of science in the field of crime scene management from the crime scene to the courtroom and beyond. Hands-on learning focuses on the examination and reconstruction of various crime scenes with the emphasis on the identification, collection, documentation and preservation of physical evidence. Students will engage in the unique features of analyzing and formulating how particular crimes were committed and eventually solved.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Culinary Arts (316)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**316-103 Food Service Industry and Menu Design****Credits:** 2

An introduction to the Food Service industry, past and present, with an overview of all types of food service. Several facility tours are included. Menu terminology is stressed, and an actual working menu will be developed by each student.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Co-requisites:** (316-147)

Complete Course Listing

**316-104 Food Quantities and Measures****Credits:** 1

Study of standardized recipes, equivalents, abbreviations, weights and measures, food presentations, and appropriate substitutions. The technical aspects extending and reducing recipes and menu costing will also be a component.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.

Complete Course Listing

**316-105 Culinary Externship Adv I****Credits:** 2

BTC instructors will coordinate an advanced culinary lab experience with employers in approved culinary positions. Students will spend 144 hours further developing their culinary knowledge and skills by working at a selected site. Evaluation of a student's work will be influenced by the satisfaction expressed by employer who provides the externship experience.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**316-106 Culinary Externship Adv II****Credits:** 3

BTC instructors will coordinate an advanced culinary lab experience with employers in approved culinary positions. Students will spend 216 hours further developing their culinary knowledge and skills by working at a selected site. Evaluation of a student's work will be influenced by the satisfaction expressed by employer who provides the externship experience.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**316-107 Culinary Internship****Credits:** 1

BTC instructors will coordinate an extended culinary lab experience with employers in approved culinary positions. Students will spend 54 hours further developing their culinary knowledge and skills by working at a selected site. Evaluation of a student's work will be influenced by the satisfaction expressed by employer who provides the externship experience.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-108) and (316-114) and (316-147)**Co-requisites:** (316-164)

Complete Course Listing

**316-108 Food Science I****Credits:** 3

An overview of the sciences involved in cooking and preparing food. The science involved with fruits, vegetables, eggs, cheese, meats, and meat cutting, fish, seafood, and baking will be discussed, demonstrated and experienced.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Co-requisites:** 316-147

Complete Course Listing

**316-109 Quantity Production of Soups, Salads ,and Dressings****Credits:** 4

Included in this course is a study of the fundamentals and principles of preparing all types of soups, salads, and dressings and an understanding of the ingredients and terminology used in the quantity production of soups, salads, and salad dressings. The student will develop competence in production of soups, salads, garnishes, and salad dressings to meet industry standards.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Co-requisites:** (316-104) and (316-108) and (316-147)

Complete Course Listing

**316-111 Culinary Externship Adv I****Credits:** 4

Students will experience a coordinated, advanced culinary lab experience with employers in approved culinary positions. Students will spend 216 hours further developing their culinary knowledge and skills by working at a selected site. Evaluation of a student's work will be influenced by the satisfaction expressed by employer who provides the externship experience.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**316-112 Culinary Externship Adv II****Credits:** 5

Students will participate in an advanced culinary lab experience coordinated with employers in approved culinary positions. Students will spend 260 hours further developing their culinary knowledge and skills by working at a selected site. Evaluation of a student's work will be influenced by the satisfaction expressed by employer who provides the externship experience.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**316-114 Quantity Production of Entrees, Sauces and Vegetables****Credits: 4**

This course includes a study of the fundamentals and principles of preparing all types of entrees, sauces and vegetables. The student will gain a working knowledge of terminology and ingredients used in quantity production of these foods. The student will develop a competence in the production of entrees, sauces and vegetables to meet industry standards. Included in this class is a culinary related community involvement project termed "Go Serve, Go Green, Go Lead".

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-104) and (316-147) and (316-108)

Complete Course Listing

**316-115 Nutrition****Credits: 2**

This course is geared for the culinary field. Students will study and practice nutritional principals while evaluating and modifying menus and recipes. Students will also learn the importance of nutritive elements and the affect to the human body.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-147)

Complete Course Listing

**316-119 Baking For Chefs****Credits: 3**

Baking production from simple to artistic and complex will be taught, demonstrated to, and later produced by culinary students. Fundamentals and principals of baking are included with the production of yeast products, cakes, pies, cookies, and quick breads. Also included is the proper use and care of baking equipment. Competence in bakery production must meet industry standards.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-108) and (316-147) and (316-104)

Complete Course Listing

**316-125 Beverage Management****Credits: 1**

Beverage Management includes history, geography, and marketing as well as responsible beverage service, cost control, and the study of bar set-up and management. A review of equipment use and care, current products available, production standards, and merchandising principles is also included.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.

Complete Course Listing

**316-131 Advanced Cuisine****Credits: 2**

This course includes the study of franchising, specialty breakfast and lunch items, sandwich preparation, marketing of food and increased sales. Students will prepare Tapas and "quick courses" utilizing a la minute cooking techniques.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Co-requisites:** 316-114

Complete Course Listing

**316-136 Catering, Special Events and Contract Food Service****Credits: 2**

This course includes a study of all special facets of Food Service, analysis of challenges special to each one, organizing and managing the catering process, needs of specific segments of the population (i.e., elderly, children), government regulations for funded/reimbursed food service, satellite food service for central production area and banquet production.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-104) and (316-114) and (316-147) and (316-103)

Complete Course Listing

**316-142 Ice Sculpturing and Decorative Food Display****Credits: 2**

This course allows students to develop competence in ice sculpturing, designing and producing decorative items for food service and special events, applying aspic, and creating, arranging, and preserving food displays.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-114) and (316-119)**Co-requisites:** (316-160) and (316-165)

Complete Course Listing

**316-147 Food Service Sanitation****Credits: 2**

This course includes a complete study of food service sanitation, safe food handling practices, high standards of personal health and hygiene and sanitation regulations and enforcement. ServSafe certification is a nationally recognized credential offered at the completion of the course and is required for program advancement.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.

Complete Course Listing

**316-149 Culinary Supervision****Credits: 3**

This course is designed to give the student an overview of supervision in a culinary setting. Included are leadership and supervision skills, interpersonal skills, motivation, communication, decision-making and training at the first-line supervision level. The duties and responsibilities of supervisors and the role of supervision in a culinary setting and making the transition to supervision are also included.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.

Complete Course Listing

**316-159 Food Purchasing , Inventory and Cost Control****Credits:** 2

The basic principles of food purchasing and purchasing procedures, including all foods and usual marketing forms. Also included will be procedures for inventory control, including the use of the computer, guidelines for selecting orders, procedures for receiving orders, basic storage principles, and accurate cost computations on a per order basis as well as a per serving basis.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-104 and 102-148)

Complete Course Listing

**316-160 Contemporary Stocks and Sauces****Credits:** 3

A concise study of mother sauces and their derivatives along with sauce history, making stocks for the specialty kitchen, and dessert sauces are covered.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-107) and (316-114) and (316-119) and (316-164)**Co-requisites:** (316-142) and (316-165)

Complete Course Listing

**316-164 Global Cuisine****Credits:** 2

Global Cuisine is a study of Regional, International, and Contemporary cuisine. The learner will gain and demonstrate working industry knowledge of terminology and specialized ingredients used in contemporary cuisine.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-108) and (316-114) and (316-147)**Co-requisites:** (316-107)

Complete Course Listing

**316-165 Contemporary Cuisine****Credits:** 3

Gourmet Foods are foods at their finest. Students will learn food terminology, the specialized methods of preparation and serving techniques associated with gourmet dining. A variety of gourmet appetizers, soups, salads, entrees, desserts, and beverages are prepared and served.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Culinary Arts Program.**Pre-requisites:** (316-107) and (316-114) and (316-119) and (316-164)**Co-requisites:** (316-142) and (316-160)

Complete Course Listing

## Dental (508)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**508-101 Dental Health Safety****Credits:** 1

Prepares dental auxiliary students to respond proactively to dental emergencies, control infection, prevent disease, adhere to OSHA Standards, and safely manage hazardous materials. Students also take patient vital signs and collect patient medical/dental histories. CPR certification is a prerequisite; students will be required to show proof of certification before the beginning the course.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Advanced Dental Assistant Program.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (508-103) and (508-113) and (508-302) and (508-304) and (508-306) and (508-307)

Complete Course Listing

**508-103 Dental Radiography****Credits:** 2

Prepares dental auxiliary students to operate x-ray units and expose bitewing, periapical, extra oral, and occlusal radiographs. Emphasis is placed on protection against xray hazards. Students also process, mount, and evaluate radiographs for diagnostic value. In this course students demonstrate competency on a manikin. In addition, students expose bite wing radiographs on a peer, role-play patient.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Advanced Dental Assistant Program.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (508-101) and (508-113) and (508-302) and (508-304) and (508-306) and (508-307)

Complete Course Listing

**508-113 Dental Materials****Credits:** 2

Prepares dental auxiliary students to handle and prepare dental materials such as liners, bases, cements, amalgam, resin restorative materials, gypsum products, and impression materials. They also learn to take alginate impressions on manikins and clean removable appliances.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Advanced Dental Assistant Program.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (508-101) and (508-103) and (508-302) and (508-304) and (508-306) and (508-307)

Complete Course Listing

**508-120 Dental Office Management****Credits:** 2

Prepares dental auxiliary students to manage telephones, appointments, recall systems, and inventory. Students also develop the skills needed to process accounts receivable and payable, collections and third party reimbursements.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (508-307)**Co-requisites:** (508-308) and (508-309) and (508-310) and (508-311)

Complete Course Listing

**508-302 Dental Chairside****Credits:** 5

Prepares dental assistant students to chart oral cavity structures, dental pathology, and restorations and to assist a dentist with basic dental procedures including examinations, pain control, amalgam restoration and cosmetic restoration. Students will also develop the ability to educate patients about preventive dentistry, brushing and flossing techniques, and dental procedures, using lay terminology. Throughout the course, students will apply decoding strategies to the correct use and interpretation of dental terminology.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Advanced Dental Assistant Program.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (508-101) and (508-103) and (508-113) and (508-304) and (508-306) and (508-307)

Complete Course Listing

**508-304 Dental & General Anatomy****Credits:** 2

Prepares dental assistant students to apply fundamentals of general and dental anatomy to informed decision-making and to professional communication with colleagues and patients.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Advanced Dental Assistant Program.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (508-101) and (508-103) and (508-113) and (508-302) and (508-306) and (508-307)

Complete Course Listing

**508-306 Dental Assistant Clinical****Credits:** 3

Students apply skills developed in Dental and General Anatomy, Dental Health Safety, Dental Chairside, Dental Materials, Dental Radiography, and professionalism in a clinical setting with patients. Emphasizes integration of core abilities and basic occupational skills.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Advanced Dental Assistant Program.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (508-101) and (508-103) and (508-113) and (508-302) and (508-304) and (508-307)

Complete Course Listing

**508-307 Dental Assistant Professionalism****Credits:** 1

Prepares dental assistant students for professional success in a dental practice or another dental health care environment. Students develop professional appearance and image. More importantly, they learn to work within ethical guidelines and legal frameworks. In preparation for entering the work force, dental assistants customize or develop their portfolios and lay out an on-going professional development plan.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Advanced Dental Assistant Program.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (508-101) and (508-103) and (508-113) and (508-302) and (508-304) and (508-306)

Complete Course Listing

**508-308 Dental Chairside Advanced****Credits:** 5

Prepares dental assistant students to adapt chairside skills to assisting with dental specialties as they are performed in general practice.

Focuses on pediatric dentistry, orthodontics, oral maxillofacial surgery, endodontics, periodontic, and prosthodontics. Students will also develop the ability to assist with sealants, perform coronal polishing, and apply topical fluoride and topical anesthetics.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (508-307)**Co-requisites:** (508-120) and (508-309) and (508-310) and (508-311)

Complete Course Listing

**508-309 Dental Laboratory Procedures****Credits:** 4

Prepares Dental Assistant students to produce alginate impressions and fabricate diagnostic models, oral appliances, temporary restorations, and custom trays. Students also polish oral appliances.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (508-307)**Co-requisites:** (508-120) and (508-308) and (508-310) and (508-311)

Complete Course Listing

**508-310 Dental Radiography - Advanced****Credits:** 1

Builds on principles and skills developed in Dental Radiography. Dental Assisting students expose full mouth series, and specialized radiographs on adult and child patients. Emphasis is placed on protection against x-ray hazards. Students will also process, mount, and evaluate radiographs for diagnostic value. In addition, they will use radiographs to explain dental health and treatment plans to patients.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (508-307)**Co-requisites:** (508-120) and (508-308) and (508-309) and (508-311)

Complete Course Listing



**508-311 Dental Assistant Clinical Advanced****Credits:** 2

Dental Assisting students apply skills developed in Dental Chairside-Advanced, Dental Lab Procedures, Dental Radiography-Advanced, and Dental Office Procedures in a clinical setting with patients. Emphasizes integration of core abilities and basic and advanced occupational skills.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (508-307)**Co-requisites:** (508-120) and (508-308) and (508-309) and (508-310)

Complete Course Listing

## Diesel Heavy Equipment I (070)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**070-308 Engine Fundamentals****Credits:** 4

In this course, learners will explore the basic workings of diesel engine systems. Learners will engage in removing the cooling, intake, and exhaust systems of diesel engines in order to better understand their function in keeping a diesel engine running at peak performance. Learners will be able to identify multiple points in a diesel engine and connect their working efficiency to EPA regulations.

**Aid Code:** 32 - Two-year Technical Diploma.**Co-requisites:** (412-305)

Complete Course Listing

**070-318 Drive Train Service****Credits:** 4

This course introduces the learner to standard hydrostatic and power transmission driveline systems. Learners will engage in repairing automatic and standard transmissions, drive shafts, u-joints, differential equalizers, and differential assemblies. Learners will be able to perform maintenance and repairs per OEM/NATEF standards to several driveline systems that are found within the current diesel trucking industry.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**070-321 Heating, Cooling and Air Conditioning****Credits:** 3

This course focuses on the theory, operation, and troubleshooting of heating, cooling, and air conditioning systems in the diesel trucking industry. Learners examine system identification, diagnostic testing, and maintenance required per OEM/NATEF/EPA standards. Knowledge gained in this course will give the learner the ability to safely test and repair heating and air conditioning systems per OEM/EPA requirements within the diesel industry.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**070-340 Hydraulics 1****Credits:** 2

This course will introduce the learner to basic hydraulic and pneumatic theory. Learners will examine hydraulic and pneumatic fundamentals, symbols, schematics, and operations. Learners will apply these fundamentals to earth moving machines, implements, and other diesel equipment.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**070-341 Electrical Fundamentals****Credits:** 4

This course introduces the learner to the theory, operation, and function of electricity as it applies to the diesel industry. Learners will read schematics, wiring diagrams, basic functions of a DVOM as well as test batteries, charging systems and learn basic voltage drop theory. Within lab settings, learners will be able to use their knowledge to test electrical circuit boards, starting and charging systems, and lighting circuits.

**Aid Code:** 32 - Two-year Technical Diploma.**Co-requisites:** (412-342) and (806-315)

Complete Course Listing

**070-342 Hydraulics 2****Credits:** 2

This course is an extension of Hydraulics 1 and will focus on the learner's ability to perform tests, servicing, adjustment, and repair of hydraulic system actuators and hydraulic systems. Learners will be able to perform system tests and repairs on hydrostatic transmissions, earth moving machines, and other current diesel implement hydraulic systems per OEM/NATEF standards.

**Aid Code:** 32 - Two-year Technical Diploma.**Co-requisites:** (070-340)

Complete Course Listing

## Diesel Heavy Equipment II (412)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**412-100 Introduction to Heavy Diesel****Credits:** 1

In this course students will be introduced to the heavy duty diesel field. Students will explore the definition, purpose, and function of heavy duty vehicles. Students will identify career paths within the diesel technician field. Students will identify and practice shop safety procedures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**412-101 Brake Service 1****Credits:** 1

In this course students will explore the fundamental concepts of braking, including friction, heat, and pressure. Students will practice inspecting, testing, servicing, and repairing air brake circuits.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-100)

Complete Course Listing



**412-102 Brake Service 2****Credits:** 1

In this course students will practice inspection, diagnosis, service, and repair of heavy duty vehicle s-cam and air disc brake systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-101)

Complete Course Listing

**412-103 Brake Service 3****Credits:** 1

In this course students will identify the purpose and function of anti-lock braking systems, stability control, and collision avoidance systems. Students will identify, test, diagnose, and repair these systems to manufacturer specifications.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-102)

Complete Course Listing

**412-104 Brake Service 4****Credits:** 1

In this course students will identify the purpose and function of heavy diesel hydraulic braking systems and air over hydraulic braking systems. Students will inspect, diagnose, adjust, and repair hydraulic brake systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-103)

Complete Course Listing

**412-105 Steering & Suspension 1****Credits:** 1

In this course students will define the purpose and function of wheel end components. Students will identify, inspect, test, adjust, and repair tires, wheels, rims and hubs to manufacturer specifications.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-100)

Complete Course Listing

**412-106 Steering & Suspension 2****Credits:** 1

In this course students will explore front-end, alignment factors, and frames as they pertain to heavy diesel vehicles. Students will inspect, test, and repair front axles, frames, and attaching hardware. Students will identify electronic alignment and alignment factors that contribute to heavy duty vehicle instability.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-105)

Complete Course Listing

**412-107 Steering & Suspension 3****Credits:** 1

In this course students will identify the purpose and function of heavy duty vehicle suspension systems and their components. Student will explore and identify air suspension, leaf spring suspension, aligning devices, equalizer systems, and all attaching hardware. Students will inspect, adjust, test and repair heavy duty vehicle suspension systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-106)

Complete Course Listing

**412-108 Steering & Suspension 4****Credits:** 1

In this course students will identify the purpose and function of steering systems and components. Students will practice diagnostic, inspection and repair procedures of heavy duty vehicle steering systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-107)

Complete Course Listing

**412-109 Drivetrain 1****Credits:** 1

In this course students will identify the purpose and function of heavy duty vehicle clutches and their components. Students will practice servicing, inspection, and replacement of several different types of heavy duty clutches.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-100)

Complete Course Listing

**412-110 Drivetrain 2****Credits:** 1

In this course students will identify supporting principles and functions of manual transmission and gear concepts. Students will explore different gearing concepts, and how these concepts apply to standard transmissions used in the heavy diesel industry. Students will inspect, diagnose, service and repair standard transmission auxiliary assemblies to manufacturer specification.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-109)

Complete Course Listing

**412-111 Drivetrain 3****Credits:** 1

In this course students identify the purpose and function of automated transmissions within the heavy duty industry. Students will explore controls associated with various types of modern automated transmissions.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-110)

Complete Course Listing

**412-112 Drivetrain 4****Credits:** 1

In this course students will identify the purpose and function of drive shafts and driven axles. Students will practice inspection, service, and repair of diesel and heavy duty vehicle drive shafts and drive axles.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-111)

Complete Course Listing

**412-113 Electrical Fundamentals 1****Credits:** 1

In this course students will explore applications of fundamental principles and theories of electricity within the heavy duty vehicle industry.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (806-315)

Complete Course Listing

**412-114 Electrical Fundamentals 2****Credits:** 1

In this course students identify the purpose and function of electrical circuits, circuit control devices, and electrical instrumentation. Students will practice testing individual and system circuits using a multimeter.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-113)

Complete Course Listing

**412-115 Electrical Fundamentals 3****Credits:** 1

In this course students will identify the purpose and function of commercial vehicle batteries, as well as advanced battery technology and placement. Students will inspect, test, charge, and replace heavy duty commercial batteries to manufacturer specifications.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-114)

Complete Course Listing

**412-116 Electrical Fundamentals 4****Credits:** 1

In this course students will identify the purpose and function of heavy duty vehicle starting and charging systems and their components. Students will practice testing, repairing, and replacing heavy duty vehicle starters, alternators and other electrical system components.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-115)

Complete Course Listing

**412-117 Electrical Troubleshooting 1****Credits:** 1

In this course, students will explore heavy duty vehicle electrical wiring. Students will practice reading and interpreting electrical wiring schematics.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-116 or 070-341)

Complete Course Listing

**412-118 Electrical Troubleshooting 2****Credits:** 1

In this course students practice inspecting, testing and repairing electrical lighting circuits and instrumentation on vehicles.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-117)

Complete Course Listing

**412-119 Electrical Troubleshooting 3****Credits:** 1

In this course students will explore heavy duty vehicle electrical signal processing. Students will identify the purpose and function of sensors and sensor information, as well as control module processing of related information. Students will practice the use of electrical signal testing equipment.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-118)

Complete Course Listing

**412-120 Electrical Troubleshooting 4****Credits:** 1

In this course students will identify the purpose and function of on-board vehicle diagnostic systems. Students will inspect, test diagnose, and repair multiple different systems to manufacturer specifications using information from control modules.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-119)

Complete Course Listing

**412-121 Diesel HVAC 1****Credits:** 1

In this course students will explore basic principles of diesel vehicle heating and air conditioning, as well as heating and air conditioning controls and operation.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-120 or 412-342)

Complete Course Listing

**412-122 Diesel HVAC 2****Credits:** 1

In this course students practice inspecting, diagnosing, and servicing diesel vehicle heating and air conditioning systems per manufacturer, EPA, and MVAC standards. This course will prepare students to become MVAC 609 certified.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-121)

Complete Course Listing

**412-123 Diesel HVAC 3****Credits:** 1

In this course students identify the purpose and function of trailer refrigeration systems and their components.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-122)

Complete Course Listing

**412-124 Advanced Safety Procedures****Credits:** 1

In this course students will identify and perform safe work practices in accordance with OSHA requirements. These practices will be applicable to diesel shops, as well as other environments in the diesel industry.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**412-125 Engine Fundamentals 1****Credits:** 1

In this course students will identify the purpose and function of various engines and their components. Students will practice calculating horsepower and torque, as well as identifying and describing unique features and characteristics of diesel engines.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-124 or 412-305)

Complete Course Listing

**412-126 Engine Fundamentals 2****Credits: 1**

In this course students will identify and describe the categories of noxious emissions from diesel engines, as well as the operations that produce them. Students will identify emissions standards for diesel vehicles and the various monitoring and controls systems used to manage emissions.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-125)

Complete Course Listing

**412-127 Engine Fundamentals 3****Credits: 1**

In this course students will explore and identify characteristics and components of diesel compression ignition systems. Students will practice inspecting and repairing these systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-126)

Complete Course Listing

**412-128 Engine Fundamentals 4****Credits: 1**

In this course students will identify characteristics and components of diesel lubrication systems. Students will practice inspecting and repairing these systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-127)

Complete Course Listing

**412-129 Engine Service Repair I 1****Credits: 1**

In this course students will practice diesel engine service and troubleshooting, including cleaning, inspecting, and determining corrective action for a variety of components.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-128 or 070-308)

Complete Course Listing

**412-130 Engine Service Repair I 2****Credits: 1**

In this course students will practice inspecting, troubleshooting, diagnosing, and repairing diesel engine cylinder block and crankshaft assemblies.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-129)

Complete Course Listing

**412-131 Engine Service Repair I 3****Credits: 1**

In this course students will identify the purpose and function of cylinder heads and associated components. Students will practice inspecting, troubleshooting, diagnosing, and repairing diesel engine cylinder heads.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-130)

Complete Course Listing

**412-132 Engine Service Repair II 1****Credits: 1**

In this course students will identify the purpose and function of air intake and crankcase ventilation systems and their components. Students will practice performing inspections and diagnostic procedures for these systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-131 or 070-308)

Complete Course Listing

**412-133 Engine Service Repair II 2****Credits: 1**

In this course students will identify the purpose and function of turbochargers and their components. Students will practice inspection, testing, and diagnostic procedures for turbocharger systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-132)

Complete Course Listing

**412-134 Engine Service Repair II 3****Credits: 1**

In this course students will identify the purpose and function of diesel engine exhaust gas recirculation systems and their components. Students will practice performing inspection and diagnostic procedures on these systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-133)

Complete Course Listing

**412-135 Hydraulics I 1****Credits: 1**

In the course students will identify the purpose and function of hydraulic systems, as well as everyday applications of those systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (806-315)

Complete Course Listing

**412-136 Hydraulics I 2****Credits: 1**

In this course students will read and interpret hydraulic system diagrams and schematics. Students will perform temperature, pressure, flow, and cycle time tests on hydraulic systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-135)

Complete Course Listing

**412-137 Hydraulics II 1****Credits: 1**

In this course students will practice the inspection, tear down, and reassembly of major hydraulic components.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-136 or 070-340) and (806-315)

Complete Course Listing

**412-138 Hydraulics II 2****Credits:** 1

In this course students will identify the purpose and function of automatic transmission systems and their components. Students will compare automatic and manual transmission systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-137)

Complete Course Listing

**412-139 Diesel Fuel Systems 1****Credits:** 1

In this course students will identify and describe the properties and characteristics of diesel fuel, fuel additives, and fuel systems. Students will practice inspection and servicing problems associated with low-pressure fuel systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-138) and (412-136 or 070-340)

Complete Course Listing

**412-140 Diesel Fuel Systems 2****Credits:** 1

In this course students will identify the purpose and function of high-pressure fuel injection systems in diesel applications. Students will practice inspection and diagnostic procedures for these systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-139)

Complete Course Listing

**412-141 Diesel Fuel Systems 3****Credits:** 1

In this course students will identify the purpose and function of various fuel pumps. Students will practice maintenance and repair of various fuel pumps.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-140)

Complete Course Listing

**412-142 Diesel Fuel Systems 4****Credits:** 1

In this course students will identify the function and construction of various fuel systems. Students will practice maintenance, reconditioning, and repairs of common fuel systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-141)

Complete Course Listing

**412-143 Inspection & Maintenance Procedures 1****Credits:** 1

In this course students will define preventative maintenance practices. Students will identify regulations related to the maintenance and operation of commercial vehicles, and identify best practices for establishing preventative maintenance and inspection schedules.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-304 or 412-142) and (412-138 or 070-342) and (412-120 or 412-342) and (412-104 or 412-310) and (412-112 or 070-318) and (412-108 or 412-311) and (412-123 or 070-321) and (412-124 or 412-305)

Complete Course Listing

**412-144 Inspection & Maintenance Procedures 2****Credits:** 1

In this course students will define the importance of preventative maintenance and practice following a preventative maintenance schedule, including reviewing inspection requirements and performing inspections and maintenance.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-143)

Complete Course Listing

**412-145 Inspection & Maintenance Procedures 3****Credits:** 1

In this course students will identify the requirements of preventative maintenance and inspection plans and programs. Students will practice preventative maintenance record keeping. Students will identify the qualifications for vehicle inspectors and brake inspectors.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-144)

Complete Course Listing

**412-146 Inspection & Maintenance Procedures 4****Credits:** 1

In this course students will practice activities that make up the preventative maintenance inspection process, such as locating information about recalls, distinguishing between shop and vehicle rules, and identifying specialty tools.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-145)

Complete Course Listing

**412-147 NATEF Certification Review****Credits:** 1

In this course students will apply standards practiced throughout the program in preparation for ASE certification and the diesel technician career field.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (412-146 or 412-347)

Complete Course Listing

**412-304 Diesel Fuel Systems****Credits:** 4

This course focuses on diesel fuel system designs and principles. Learners will analyze the basics of diesel fuel system injection pumps, injectors, and injection system operation, as well as the maintenance and troubleshooting of electronic fuel systems per OEM/NATEF standards. Learners will be able to perform diagnostic service and repairs on current medium and heavy diesel engine fuel systems within the trucking industry.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**412-305 Advanced Safety Procedures****Credits:** 1

This course will focus on OSHA, and safety within a shop setting. Learners will work towards and receive a certificate for crane training per OSHA training requirements. Knowledge gained will give the learner the ability to operate a crane and to work safely within a diesel shop as well as other diesel industry environments.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**412-306 Diesel Engine Service Repair I****Credits:** 3

This course is a continuation of the Engine Fundamentals course. Learners will apply their knowledge of diesel engine parts and functions to perform emissions tests (intakes and exhaust sensors) as well as troubleshoot electrical system issues. Learners will be able to perform these diagnostics to the level of EPA regulations and standards.

**Aid Code:** 32 - Two-year Technical Diploma.**Co-requisites:** (070-308)

Complete Course Listing

**412-307 Diesel Engine Service Repair II****Credits:** 3

This course is a continuation of Diesel Engine Service Repair I. Learners will breakdown and put together complete diesel engine systems, applying knowledge of external parts and functions, while paying close attention to the internal parts and functions. Learners will be able to perform diagnostics on all systems combined, ensuring that intake and exhaust systems meet EPA standards and entire engine systems are rebuilt to full working capacity.

**Aid Code:** 32 - Two-year Technical Diploma.**Co-requisites:** (070-308)

Complete Course Listing

**412-308 NAETF Certification Review****Credits:** 1

Applying the NATEF standards practiced throughout this program, this course is designed to prepare the learner for future ASE certifications while practicing in the field as a Diesel Technician.

**Aid Code:** 32 - Two-year Technical Diploma.**Pre-requisites:** (412-349)

Complete Course Listing

**412-310 Brake Service Fundamentals****Credits:** 4

This course introduces the learner to current trucking industry braking systems. Using OEM/NATEF standards, learners perform diagnosis, service and repairs on air, hydraulic, manual, and electric parking brakes as well as antilock braking systems that include wheel-end procedures. Learners apply the fundamentals of braking systems to perform proper diagnostics and repairs to current diesel vehicles.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**412-311 Truck Steering & Suspension****Credits:** 4

This course focuses on the multiple steering and suspension systems used on current medium and heavy duty diesel vehicles. Using OEM/NATEF standards and specifications, students engage in proper inspection and repairs on leaf spring, solid rubber, air ride, torsion bar suspension, and power steering as well as manual steering units. Learners will be able to perform electronic alignment procedures and repair suspension as well as steering problems commonly found within the diesel trucking industry.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**412-342 Electrical Systems Troubleshooting****Credits:** 4

This course develops the learners' electrical troubleshooting skills. Learners analyze testing techniques for advanced electrical circuits using DVOM's and scan tools, and interpret results using OEM/NATEF standards. The learner will be able to perform advanced electrical diagnostics and repairs on current diesel vehicle electrical systems.

**Aid Code:** 32 - Two-year Technical Diploma.**Co-requisites:** (070-341)

Complete Course Listing

**412-347 Inspection & Maintenance Procedures****Credits:** 4

This course focuses on performing state and federal Motor Vehicle Safety inspections to appropriate Department of Transportation (DOT) standards. Learners explore multiple system component identification, inspection procedures, maintenance procedures per OEM/NATEF, and DOT standards. Learners will be able to apply knowledge of current state and federal documentation, and inspection procedures, understanding the importance of these inspections and documents when entering the diesel industry.

**Aid Code:** 32 - Two-year Technical Diploma.**Pre-requisites:** (412-349)

Complete Course Listing

**412-349 Equipment Welding****Credits:** 2

This course introduces the learner to the basic field of metals. Learner will engage in Shielded Metal Arc Welding (SMAW), Oxy-Fuel Cutting (OFC), and Gas Tungsten Arc Welding (GTAW). The learner will be able to perform the aforementioned basic welding techniques used in the diesel industry.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

## Early Childhood Education (307)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**307-108 ECE: Early Language & Literacy****Credits:** 3

This course explores strategies to encourage the development of early language and literacy knowledge and skill building in children birth to 8 years of age. Learners will investigate the components of literacy including; literacy and a source of enjoyment, vocabulary and oral language, phonological awareness, knowledge of print, letters and words, comprehension and an understanding of books and other texts. Theories and philosophies regarding children's language and literacy development will be addressed. Dual language learning will be examined within the context of developmentally appropriate practices. Assessment tools for early language and literacy acquisition will be reviewed.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-110 ECE: Social Studies, Art & Music****Credits:** 3

This 3-credit course will focus on beginning level curriculum development in the specific integrated content areas of social studies, art, music, & movement (SSAMM).

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-112 ECE: STEM****Credits:** 3

This 3-credit course will focus on beginning level curriculum development in the specific integrated content areas of science, technology, engineering and mathematics.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-148 ECE: Foundations of Early Childhood Education****Credits:** 3

This 3-credit course introduces you to the early childhood profession. Course competencies include: explore the concepts of diversity, cultural responsiveness, and anti-bias as it relates to early childhood education, investigate the history of early childhood education, examine regulatory requirements for early childhood education programs in WI, summarize types of early childhood education settings, identify the components of a quality early childhood education program, summarize responsibilities of early childhood education professionals, explore early childhood curriculum models and examine the critical role of play as it relates to developmentally appropriate practice..

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-151 ECE: Infant & Toddler Development****Credits:** 3

In this 3-credit course you will study infant and toddler development as it applies to an early childhood education setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, and anti-bias perspectives; analyze development of infants and toddlers (conception to thirty-six months); correlate prenatal and postnatal conditions with development; summarize child development theories; analyze the role of heredity and the environment; examine culturally and developmentally appropriate environments for infants and toddlers, examine the role of brain development in early learning (conception through thirty-six months); examine caregiving routines as curriculum; and examine developmental and environmental assessment strategies for infants and toddlers.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-166 ECE: Curriculum Planning****Credits:** 3

This 3-credit course examines the components of curriculum planning in early childhood education. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play; establish a developmentally appropriate environment; integrate Developmentally Appropriate Practice (DAP) into curriculum; develop activity plans that promote child development and learning; develop curriculum plans that promote child development and learning across all content areas; analyze early childhood curriculum models.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-167 ECE: Health, Safety, and Nutrition****Credits:** 3

This 3-credit course examines the topics of health, safety, and nutrition within the context of the early childhood educational setting. Course competencies include: integrate strategies that support diversity, cultural, responsiveness, and anti-bias perspectives; examine governmental regulations and professional standards as they apply to health, safety, and nutrition; plan a safe early childhood environment; plan a healthy early childhood environment; plan nutritionally sound menus; examine child abuse and neglect issues and mandates; apply Sudden Infant Death Syndrome (SIDS) risk reduction strategies, describe strategies to prevent the occurrence of Shaken Baby Syndrome (SBS); incorporate health, safety, and nutrition concepts into the children's curriculum.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-174 ECE: Introductory Practicum****Credits:** 3

In this 3-credit practicum course you will learn about and apply the course competencies in an actual early childhood setting. You will explore the standards for quality early childhood education, demonstrate professional behaviors, and meet the requirements for training in the Wisconsin Model Early Learning Standards.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (307-148) and (307-151) and (307-167)

Complete Course Listing



**307-175 ECE: Preschool Practicum****Credits:** 3

This course will apply as the capstone course in The Registry Preschool Credential. You will be placed or working in an early childhood setting with 3-5 year old children and create a portfolio that prepares you for The Registry commission. In this course you will be implementing regulations and standards for quality early childhood education, applying knowledge of child development and positive guidance, utilizing observation and assessment techniques, and assessing developmentally appropriate environments for preschoolers.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (307-177)**Co-requisites:** (307-187) and (307-112)

Complete Course Listing

**307-177 ECE: Intermediate Practicum****Credits:** 3

In this 3-credit course you will be implementing regulations and standards for quality early childhood education, applying knowledge of child development and positive guidance, utilizing observation and assessment techniques, and assessing developmentally appropriate environments for children. Note: Before receiving a practicum placement students must be able to pass the DCF fingerprint background check process, have a current DCF Staff Health Report with a negative Tuberculosis Test result and complete CPR and First Aid.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (307-174)**Co-requisites:** (307-179) and (307-188) and (307-108) and (307-110)

Complete Course Listing

**307-178 ECE: Art Music & Language Arts****Credits:** 3

This 3-credit course will focus on beginning level curriculum development in the specific content areas of art, music, and language arts. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play as it relates to art, music, and language arts; establish a developmentally appropriate environment for art, music, and language arts; develop activity plans that promote child development and learning; analyze caregiving routines as curriculum; create developmentally appropriate language, literature, and literacy activities; create developmentally appropriate art activities; create developmentally appropriate music and movement activities.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-179 ECE: Child Development****Credits:** 3

This 3-credit course examines child development within the context of the early childhood education setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, and anti-bias perspectives; analyze social, cultural, and economic influences on child development; summarize child development theories; analyze development of children ages three through five; analyze development of children ages five through eight; relate child development research findings to teaching practice; analyze the role of heredity and the environment; examine the role of brain development in early learning (ages 3-8); examine developmental and environmental assessment strategies for children ages 3-8.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 307-151

Complete Course Listing

**307-187 ECE: Children with Differing Abilities****Credits:** 3

This 3-credit course examines positive strategies to guide children's behavior in the early childhood education setting. Course competencies include: integrate strategies that support diversity, cultural responsiveness, diversity and anti-bias perspectives; analyze techniques for and effects of strong relationship-building with children and families; identify positive and proactive guidance principles and techniques to support children; analyze environmental influences on child behavior; identify strategies that support children's active engagement in affect the learning environment; identify strategies that proactively teach emotional literacy and regulation techniques; identify strategies that proactively teach friendship skills; identify strategies that proactively teach children calming, relaxation, and problem-solving techniques; utilize observation and assessment techniques to assess and interpret behavior; create a behavior support plan based on a functional behavior assessment; create a guidance philosophy. This course meets the requirements of for the "24 hour Wisconsin" Pyramid Model training.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-188 ECE: Guiding Children's Behavior****Credits:** 3

This 3-credit course examines positive strategies to guide children's behavior in the early childhood education setting. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; summarize early childhood guidance principles; analyze factors that affect the behavior of children; practice positive guidance strategies; develop guidance strategies to meet individual needs; create a guidance philosophy. This course meets the requirements for the Pyramid Model training.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-192 ECE: Practicum 2****Credits:** 3

In this 3-credit course you will learn about and apply the course competencies in an actual child care setting. The course competencies include: identify children's growth and development; maintain the standards for quality early childhood education; practice strategies that support diversity and anti-bias perspectives; implement student teacher-developed activity plans; identify the elements of a developmentally appropriate environment; implement positive guidance strategies; demonstrate professional behaviors; utilize caregiving routines as curriculum; utilize positive interpersonal skills with children; utilize positive interpersonal skills with adults.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (307-148) and (307-151) and (307-167) and (307-178) and (307-179)**Co-requisites:** (307-174) and (307-194)

Complete Course Listing

**307-194 ECE: Math, Science, & Social Studies****Credits:** 3

This 3-credit course will focus on beginning level curriculum development in the specific content areas of math, science and social studies. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play as it relates to math, science, and social studies; establish a developmentally appropriate environment for math, science, and social studies; develop activity plans that promote child development and learning; create developmentally appropriate science activities; create developmentally appropriate math activities; create developmentally appropriate social studies activities.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-195 ECE: Family and Community Relationships****Credits:** 3

In this 3-credit course you will examine the role of relationships with family and community in early childhood education. Course competencies include: implement strategies that support diversity, cultural responsiveness, and anti-bias perspectives when working with families and community; analyze contemporary family patterns, and trends; identify strategies to strengthen and support families; explore effective communication strategies; discover strategies for developing respectful and reciprocal relationships with children and families; analyze strategies to promote family engagement in early childhood education programs; explore a variety of formats for meeting with families in their contexts; advocate for children and families; and explore community resources that provide a range of services for children and families.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-197 ECE: Practicum 3****Credits:** 3

In this 3-credit practicum course you will learn about and apply the course competencies in an actual child care setting. The course competencies include: assess children's growth and development; implement the standards for quality early childhood education; integrate strategies that support diversity and anti-bias perspectives; build meaningful curriculum; provide a developmentally appropriate environment; facilitate positive guidance strategies; evaluate one's own professional behaviors and practices; lead caregiving routines as curriculum; utilize positive interpersonal skills with children; utilize positive interpersonal skills with adults.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (307-192)**Co-requisites:** (307-198)

Complete Course Listing

**307-198 ECE: Administering an ECE Program****Credits:** 3

This 3-credit course focuses on the administration of an early childhood education program. Course competencies include: integrate strategies that support diversity and anti-bias perspectives; analyze the components of an ECE facility; design an ECE program; analyze the aspects of personnel supervision; outline financial components of an ECE program; apply laws and regulations related to an ECE facility; advocate for the early childhood profession.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**307-199 ECE: Advanced Practicum****Credits:** 3

In this final 3-credit practicum course you will demonstrate competence in supporting child development through observation, assessment and implementation of teaching strategies as you work in and learn about and apply the course competencies in an actual early childhood setting. You will demonstrate a high level of skill in fostering relationships with children, families and early childhood professionals, and use skills learned in a lead teacher role to develop a career plan to transition from student to early childhood education professional. Note: Before receiving a practicum placement students must be able to pass the DCF fingerprint background check process, have a current DCF Staff Health Report with a negative Tuberculosis Test result and complete CPR and First Aid.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (307-175 or 307-197) and (307-177)**Co-requisites:** (307-195)

Complete Course Listing

## Elective (999)

**999-888 Orientation Demo****Credits:** 0**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**999-900 Elective****Credits:** 3

Complete Course Listing

**999-902 Elective****Credits:** 3

Complete Course Listing

**999-997 Elective****Credits:** 2

2 credit elective.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**999-998 General Education Elective****Credits:** 3

Complete Course Listing

**999-999 Elective****Credits:** 3**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Electric Power Distribution (413)

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Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to  
Academic Programs (p. 22).

**413-303 Industrial Electricity for Line Technicians****Credits:** 2

Through this course, students gain basic knowledge of the fundamentals of electricity. Topics introduced in this course include magnetism, DC and AC fundamentals, principals of electricity, as well as an overview of transformer operation. Students will be able to apply theories learned in the maintenance and repair of electrical equipment as it applies to the electric utility industry.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Electric Power Distribution Program.

Complete Course Listing

**413-304 Safety Procedures I-Line Technicians****Credits:** 1

This course introduces the student to safety in the electric utility industry. Students interpret safety precautions in multiple work situations, adhering to OSHA regulations. Students will be able to apply safety rules and procedures in simulated work situations.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Electric Power Distribution Program.**Co-requisites:** (804-304 or 804-306 or 804-113) and (413-303) and (413-306) and (413-310) and (413-315)

Complete Course Listing

**413-305 Safety Procedures II-Line Technicians****Credits:** 1

This course continues and expands on topics introduced in Safety Procedures I. Students will increase their knowledge in safe handling of energized conductors and underground lines through the analysis of safe work practices and accident investigations. Students will understand a line technician's responsibility in protecting work areas and the public in everyday work and emergency situations.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Electric Power Distribution Program.**Pre-requisites:** (413-315)**Co-requisites:** (413-307) and (413-320) and (413-325)

Complete Course Listing

**413-306 Commercial Driver's License (CDL) Preparation****Credits:** 1

This course prepares students to take the written portion of the Class A Commercial Driver's License test. Students, upon completion, will take the written test at the Department of Motor Vehicles' test center to acquire the instruction permit.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Electric Power Distribution Program.**Pre-requisites:** (413-303) and (413-304) and (413-310) and (413-315)

Complete Course Listing

**413-307 EPD Mapping and Automation****Credits:** 1

This course introduces students to the basics of smart grids. Students will examine GPS mapping, utility system automation, and metering. Students will be able to identify different aspects of the smart grid and how it is used in the distribution of electricity to various consumers.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Electric Power Distribution Program.**Pre-requisites:** (413-315)**Co-requisites:** (413-305) and (413-320) and (413-325)

Complete Course Listing

**413-310 Electric Power Distribution 1A****Credits:** 5

This course introduces students to the generation, transmission, and distribution systems used to supply power to consumers. Students will operate digger-derrick trucks, set and climb power poles, as well as engage in preparing ropes and knots for lifting and hoisting materials into the air. This course also strengthens the students' knowledge of the types and functions of basic materials used on the job as well as following the procedures for proper use of these materials in the field.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Electric Power Distribution Program.**Co-requisites:** (804-304 or 804-306 or 804-113) and (413-303) and (413-304) and (413-306) and (413-315)

Complete Course Listing

**413-315 Electric Power Distribution 1B****Credits:** 5

This course is a continuation of Electric Power Distribution 1A where students will use their knowledge to construct overhead single and three-phase power lines. Emphasis will be placed on the student's ability to follow safety rules and construction standards in order to build power lines to specifications provided. In preparation for coursework in the second semester of this program, students examine the basics of transformer operation.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Electric Power Distribution Program.**Co-requisites:** (804-304 or 804-306 or 804-113) and (413-303) and (413-304) and (413-306) and (413-310)

Complete Course Listing

**413-320 Electric Power Distribution 2A****Credits:** 5

This course is a continuation of Electric Power Distribution 1B. Students apply the theory of three-phase electrical power systems, including wye and delta systems, in order to maintain and construct transformer installations. Students engage in simulated troubleshooting situations and investigate problems which lead them to actively participate in solving the problem.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Electric Power Distribution Program.**Pre-requisites:** (413-315)**Co-requisites:** (413-305) and (413-325) and (413-307)

Complete Course Listing

**413-325 Electric Power Distribution 2B****Credits:** 5

This course is a continuation of Electric Power Distribution 2A. Students apply the principles of construction and maintenance of an underground residential distribution (URD). Students will engage in the installation underground wire and related equipment of a URD system. They will also operate trenching equipment as well as perform the removal of overhead lines and structures. At the conclusion of this course, students will have the necessary knowledge and skills to begin work in the electric utility industry.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Electric Power Distribution Program.**Pre-requisites:** (413-315)**Co-requisites:** (413-305) and (413-320) and (413-307)

Complete Course Listing

**413-510 JAC Electrician I****Credits:** 2

This course follows the first semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-511 JAC Electrician II****Credits:** 2

This course follows the second semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-512 JAC Electrician III****Credits:** 2

This course follows the third semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-513 JAC Electrician IV****Credits:** 2

This course follows the fourth semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-514 JAC Electrician V****Credits:** 2

This course follows the fifth semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-515 JAC Electrician VI****Credits:** 2

This course follows the sixth semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-516 JAC Electrician VII****Credits:** 2

This course follows the seventh semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-517 JAC Electrician VIII****Credits:** 2

This course follows the eighth semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-518 JAC Electrician IX****Credits:** 2

This course follows the ninth semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-519 JAC Electrician X****Credits:** 2

This course follows the tenth semester of the National Joint Apprenticeship and Training Committee (NJATC) approved curriculum.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-530 ABC Electrician I****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-531 ABC Electrician II****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-532 ABC Electrician III****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-533 ABC Electrician IV****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-534 ABC Electrician V****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-535 ABC Electrician VI****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-536 ABC Electrician VII****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-537 ABC Electrician VIII****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-538 ABC Electrician IX****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-539 ABC Electrician X****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-750 DC Electricity for Industrial Electricians****Credits:** 1.75

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-751 AC Electricity for Industrial Electricians****Credits:** 2

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-752 Codes for Industrial Electricians 1: Introduction to the NEC****Credits:** .5

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-753 Codes for Industrial Electricians 2: OCPD and Electrical Device Installations****Credits:** .5

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing



**413-754 Codes for Industrial Electricians 3: Article 250 Part A****Credits:** .5

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-755 Codes for Industrial Electricians 4: Article 250 Part B****Credits:** .5

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-756 Codes for Industrial Electricians 5: Article 300 Cords/Cables, and Hazardous Installations****Credits:** .5

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-757 Codes for Industrial Electricians 6: Conductors, Raceways and Data/Communication Cables****Credits:** .5

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-758 Codes for Industrial Electricians 7: Motors and Generators****Credits:** .5

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-759 Codes for Industrial Electricians 8: Transformers****Credits:** .5

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-760 Industrial Electrician Transformers****Credits:** 1

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-761 Industrial Electrician Motors & Generators****Credits:** 1

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing



**413-762 Industrial Electrician Motor Controls 1****Credits: 1**

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-763 Industrial Electrician Motor Controls 2****Credits: 1**

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-764 Industrial Electrician Motor Controls 3****Credits: 1**

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-765 Power Systems & Variable Speed Drives for Industrial Electricians****Credits: 2**

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-766 Fluid Power Systems for Industrial Electricians - Pneumatics****Credits: .5**

The hydraulics course is customized for Industrial Electricians and relates the basics of hydraulic theory and hydraulic components. Safety and the interrelationship between hydraulic power with electrical control is emphasized.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-767 Fluid Power Systems for Industrial Electricians-Hydraulics****Credits: .5**

The hydraulics course is customized for Industrial Electricians and relates the basics of hydraulic theory and hydraulic components. Safety and the interrelationship between hydraulic power with electrical control is emphasized.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-768 Industrial Electrician Solid State Electronics****Credits: 1.75**

This course provides the apprentice with the skills and knowledge for troubleshooting basic solid-state devices and circuits. The construction, identification, and operating characteristics of solid-state devices is investigated. The apprentice builds test circuits, gathers and analyzes data, and follows safety procedures. Methods for locating defective components are applied. The replacement of printed circuit board components is performed. Also examined is the effect of temperature on the operation of solid-state devices.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-769 Industrial Electrician Programmable Logic Controllers: 1****Credits: 1**

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-770 Industrial Electrician Programmable Logic Controllers: 2****Credits: 1**

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-771 Industrial Electrician Programmable Logic Controllers: 3**  
**Credits: 1**

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-772 Green Awareness for the E & I Trades**  
**Credits: 1**

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**413-773 Safety & Print Reading for Industrial Electricians**  
**Credits: .5**

This is the new aligned curriculum model for related instruction that is effective for the 2013-2014 school year. This program configuration adds the new green awareness module in 2012, and aligns related instruction with employer competencies which were prioritized in 2010. This model illustrates best practices from the WTCS colleges to deliver 720 hours of related instruction to apprentices in 4 years, accelerates the first year coursework, assumes a 16-week semester, and maintains 4 hours per week in class (or the equivalent). The colleges and employers will have flexibility to schedule each of the terms based on local needs.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

## Electromechanical Technology (620)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
Academic Programs (p. 22).

**620-100 Hydraulics**  
**Credits: 3**

This is a course in fundamental principles in the operation of fluid power, as it is used in the transmission of power through various components such as cylinders, motors, pumps, and valves.

**Aid Code:** 10 - Associate Degree.

**Restrictions:** Restricted to students admitted to Electro-Mechanical Technology Program.

**Pre-requisites:** 804 110

**Co-requisites:** (834-110 or 804-113)

Complete Course Listing

**620-101 Fundamentals of DC circuits 1**  
**Credits: 1**

This course is a study of the basic theories, concepts, elements, and principles of DC circuits. The student investigates voltage, current, resistance and power, and will measure these values. Topics covered include Ohm's Law, meter use and basic series circuits.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-102 Fundamentals of DC Circuits 2**  
**Credits: 1**

This course is a continuation of DC circuits 1. Students advance their knowledge and skill using series to parallel circuits and complex (series-parallel and parallel-series) circuits.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (620-101)

Complete Course Listing

**620-103 Fundamentals of DC Circuits 3**  
**Credits: 1**

This course is a continuation of DC circuits 2. The student will analyze voltage dividers and be introduced to capacitors and inductors, their DC charge and discharge time, and their applications. Students will work with magnetism and the operation of relays and solenoids.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (620-102)

Complete Course Listing

**620-104 Digital Logic**  
**Credits: 1**

Students define basic logic gate functions and basic Boolean logic expressions. Students will analyze logic voltage timing diagrams, and determine logic outputs given logic inputs. Students perform lab activities in relation to logic operations using switches and gates.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (620-101)

Complete Course Listing

**620-105 Pneumatics****Credits: 2**

This course uses fundamental principles of compressed gasses that operate and power industrial equipment. Principles are applied in transmission of power through the various components such as cylinders, motors, compressors, distribution systems and valves. It also includes the analysis of pneumatic circuits.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 620-100

Complete Course Listing

**620-106 Electric Motors****Credits: 1**

The students perform, through lab activities, the basics of Motor & DC Permanent Magnet Theory and solid state DC Drives. The student will connect and operate DC Series, Shunt and Compound motors.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-101)

Complete Course Listing

**620-107 Variable Speed Drives****Credits: 1**

This course introduces students to the application of variable speed drives (VSD's). Students examine traditional and current methods of motor control in DC and AC drive installations. Students engage in power and control circuitry, troubleshooting principles, and programming of Variable Frequency Drives (VFDs) to control AC motors.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-108 Motors and Drives 3****Credits: 1**

This course is a continuation of Motors & Drives 2. Students analyze poly-phase motors and troubleshooting control circuits. Students will engage in hands on activities which include Variable Frequency Drives and Shaft Coupling Alignment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (620-123)

Complete Course Listing

**620-109 Relay Logic****Credits: 1**

Students analyze relay theory and operation and apply this to hardwired AND & OR circuits, as well as start/stop circuits using relays. Relay ladder diagrams and motor starter circuits are defined.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-101)

Complete Course Listing

**620-110 Introduction to Programmable Logic Controllers (PLC)****Credits: 4**

The student will study components that make up a programmable or microprocessor system and the various applications and operations used for digital and process controls in industry. The further use of programming is expanded to include ladder logic and diagrams. Diagnostic troubleshooting is applied along with analysis of interfacing microprocessors and programmable controllers to other control systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 605-102

Complete Course Listing

**620-111 Programming Fundamentals 1****Credits: 1**

This course introduces students to the basics of programming fundamentals. Students analyze the fundamentals of computer operations, programming and logic principles, and empirical program design. Students will employ programming language to program microprocessors and other devices.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-124)

Complete Course Listing

**620-112 Programming Fundamentals 2****Credits: 1**

This is a continuation of Programming Fundamentals 1. Students advance their knowledge and skill with instructions and data manipulation. In a hands-on laboratory environment, language and instruction sets will be defined and used to control devices with a special emphasis on industrial applications.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-111)

Complete Course Listing

**620-113 Fundamentals of AC Circuits 1****Credits: 1**

Students explore the theory of alternating voltage and current, the sine wave and transformers. Students measure these values with meters and oscilloscopes in relation to reactance, impedance and phase differences.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-101)

Complete Course Listing

**620-114 Fundamentals of AC Circuits 2****Credits: 1**

This course is a continuation of AC circuits 1. Students analyze capacitive and inductive reactance, impedance and phase properties of AC waveforms. Students will examine basic RL, RC and RLC circuits, as well as basic 3 phase voltage measurement.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-113)

Complete Course Listing

**620-115 Computer and Robotic Programming****Credits:** 4

This course is primarily for students with little or no programming background. The course includes the fundamentals of computer operations. Students will be exposed to programming and logic principles that apply to industrial programming applications. The programming language will be employed to program microprocessors and robotic controls. The language and instruction sets will be studied and used to control devices with a special emphasis on industrial applications. The course includes hands-on laboratory sessions.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 620-110

Complete Course Listing

**620-116 Fluid Power 1: Basic Pneumatics****Credits:** 1

This course will introduce the student to pneumatics. Students will define the differences between hydraulics and pneumatics through observation of various circuit behavior. Hands-on learning will emphasize control theory of linear and rotary actuators and Vacuum technology will be examined.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-117 Fluid Power 2: Basic Hydraulics****Credits:** 1

This course is an introduction to Hydraulics. Students will examine the physical principles of confined fluids under pressure in both static and dynamic states. Hands-on learning will allow the student an opportunity to put together all of the components that comprise a hydraulic system.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-116)

Complete Course Listing

**620-118 Fluid Power Applications****Credits:** 1

This course continues the study of pneumatics. Emphasis is placed on the electrical controls of pneumatic circuits while students analyze the operation of sequencing circuits and apply troubleshooting principles to identify faulted components.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-117)

Complete Course Listing

**620-119 Fluid Power 4: Intermediate Hydraulics****Credits:** 1

This course continues in the study of hydraulics. Students engage in hands-on activities which allow further practice with hydraulic flow, directional and pressure controls. Students spend time analyzing fluid conditioning, system maintenance and troubleshooting.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-144)

Complete Course Listing

**620-120 Motors and Drive Systems****Credits:** 2

This course covers principles for DC motors, AC motors, the drives and variable frequency drives (VFDs). Students will learn about motor types and drives in relationship with the appropriate application within industry. Also covered are electrical protective devices controls, single phase and three-phase power systems, and EMI. The student learns to design, install, and troubleshoot motor controls. Students learn more about electrical and electronic schematic diagrams to better understand the operation of drive control systems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (605-106)**Co-requisites:** (620-135)

Complete Course Listing

**620-121 Programmable Automation Controllers (PACs) 1****Credits:** 1

This course is a continuation of the Programmable Logic Controllers course. Introduction to PACs is defined, including Creating Tags & Bit Level Instructions, PAC operation of Timers & Counters, Program Control, Project Organization & Documentation Arrays. Students engage in hands on activities to apply the aforementioned concepts.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-124)

Complete Course Listing

**620-122 Programmable Automation Controllers (PACs) 2****Credits:** 1

This course is a continuation of PACs 1 with further exploration into Analog Inputs/Outputs, connecting Math theories, comparisons, move instructions and data manipulation. Students engage in hands-on lab activities with the aforementioned concepts as well as Interface Wiring.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-121)

Complete Course Listing

**620-123 Programmable Automation Controllers (PACs) 3****Credits:** 1

This class is a continuation of PACs 2 and includes study of Sequencers and Shift Registers. Students engage in lab activities which include the analysis of Function Block Programming, Structured Text and Sequential Function Chart programming.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-131)

Complete Course Listing

**620-124 Programmable Logic Controllers - PLCs****Credits:** 1

This course is an introduction to PLCs. Students will learn the parts and operation of a Programmable Logic Controller. They will apply basic ladder logic programming and transfer programs from the PC to the PLC. Students explore start stop circuits, timers and counters as they relate to the aforementioned concepts.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-109)

Complete Course Listing

**620-125 Servos and Process Controls****Credits:** 2

Servomechanisms are used in various automated systems. Students will study principles and theories of servomechanisms and apply them in the laboratory. Process controls and instrumentation are applied to control loops systems in the laboratory. Electrical and electronic diagrams are studied to understand control loop systems. Some experiments are conducted on: hydraulic servo controls systems, DC motors, AC motors, stepper motors, and other controls systems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (605-106)**Co-requisites:** (620-135)

Complete Course Listing

**620-126 Robotics 1****Credits:** 1

The students are introduced to the basics of robotics in this course. This includes defining specific terminology, types, configurations, specifications and application characteristics of robots. The student examines the basic parts of the robot and demonstrates their knowledge through the operation of these systems in laboratory exercises.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-112)

Complete Course Listing

**620-127 Robotics 2****Credits:** 1

This course is a continuation of Robotics 1. Student engage in more advanced programming, using subroutines, Inputs and outputs, as well as data manipulation. Students are exposed to and use schematics as well as examine robotic troubleshooting.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-126)

Complete Course Listing

**620-128 Servo systems Introduction****Credits:** 1

This course moves the student into further exploration of the automation process by introducing them to Servos and Feedback Devices. Hands-on lab activities engage the student in working with basic servo systems and Servo Fluid Power control.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-136)

Complete Course Listing

**620-129 Servo Motion Programming****Credits:** 1

This course is a continuation of Servo Systems Introduction in which students learn programming motion control using servo systems. The student will create a motion profile, incorporating Registration and Camming techniques.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-141)

Complete Course Listing

**620-130 Automated Cell Design and Planning****Credits:** 2

The student learns the parameters and scope under which a project must function and be constructed. Based on these parameters, the student will design, plan and learn the steps of execution in building an automated robotic cell. Students will learn planning and the use of control tools such as: work breakdown schedule (WBS) and Gantt charts. These tools assist the student in the design, plan, and execution of their work cell. These tools also assist the student in keeping their project on schedule and on budget.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Electro-Mechanical Technology Program.**Pre-requisites:** (620-115) and (605-106)**Co-requisites:** (620-125)

Complete Course Listing

**620-131 Solid State Devices 1****Credits:** 1

This course introduces the student to semiconductor materials, the operation of diodes, Zener diodes and the construction of rectifier and filter circuits. Students perform laboratory experiments that include fundamental transistor construction and switching operation in order to verify the theory.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-114)

Complete Course Listing

**620-132 Solid State Devices 2****Credits:** 1

This course is a continuation of Solid State Devices 1. Students examine BJT amplifier circuits. JFETs and MOSFETs as well as their uses application in industry. Specifications and schematics of all devices are analyzed.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-131)

Complete Course Listing

**620-133 Solid State Devices 3****Credits:** 1

This course is a continuation of Solid State Devices 1. SCRs and Triacs operation and applications are introduced to the student as well as an analysis of control circuitry and phase angle firing properties.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-128)

Complete Course Listing

**620-134 Sensors****Credits:** 1

Covers various types of sensors used in industrial operations such as inductive and capacitive proximity detectors, Hall-effect devices and various optical sensing modes. Applications are explored, and connection modes are verified with hands-on activities.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-124)

Complete Course Listing



**620-135 Power Devices****Credits:** 3

This course is an essential study of the various types of power handling solid-state devices found in automation and other electronic equipment. The devices include SCR's, DIAC's and TRIAC's. Regulated and unregulated design power supplies are covered, which include analog and switching types. This course will introduce the student to the design of circuits using power handling devices and the ratings for these types of components. Students will learn to read and interpret schematics used in the electronics industry. This course teaches the study of electronic machine elements, which includes electrical, and electronics drawings and the associated symbols.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 605-106

Complete Course Listing

**620-136 Automation 1****Credits:** 1

This course expands the student's knowledge from program courses by exploring Thermocouple and RTD I/O functions in a processor format. Students engage in formatting and using trend charts and high speed counters.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-148)

Complete Course Listing

**620-137 Automation 2****Credits:** 1

This course is a continuation of Automation 1, expanding the student's knowledge base by introducing DNET (device net) ENET (EtherNET) communication and Configuring Devices in RSNetworkx. Through the use of RSNetworkx, students perform these concepts through barcode scanning and RFID functioning.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (620-139)

Complete Course Listing

**620-138 Automation 3****Credits:** 1

This course is a continuation of Automation 2 and further explores processing functions of locating and editing I/O Tags and Devices, and forcing bits. Students engage in hands on activities which include troubleshooting PAC Systems through analyzing digital, analog and distributed I/O.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-142)

Complete Course Listing

**620-139 Machine Vision Systems****Credits:** 1

This course gives students an introduction to vision systems. Students perform activities which include camera setup, lighting parameters, lenses and study their applications. Students program vision systems and integrate them into PAC systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-133)

Complete Course Listing

**620-140 Robotic Systems****Credits:** 3

The basics of robotics are introduced. This includes terminology, types, configurations, specifications and application characteristics of robots. Mechanical drive systems, along with control systems for automation, are studied. The student learns the basic parts of the robot and will operate these systems in laboratory exercises.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Electro-Mechanical Technology Program.**Pre-requisites:** (605-104) and (620-105) and (620-115)

Complete Course Listing

**620-141 Process Control 1****Credits:** 1

This course introduces students to process control apply concepts through Open Loop Discrete Control, PID function, and Temperature Control activities performed in the lab.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-122)

Complete Course Listing

**620-142 Process Control 2****Credits:** 1

This course is a continuation of Process Control 1, and analyzes more concepts through lab experiments in Process Level Control, Flow Control, and Pressure Control.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-141)

Complete Course Listing

**620-143 Process Control 3****Credits:** 1

This class is a continuation of Process Control 2. The student explores more indepth concepts in the process field by analyzing Weight Control and Loop Calibrations. Hands-on lab activities engage the student in Function Block programming of PID instructions.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-142)

Complete Course Listing

**620-144 Human Machine Interfaces (HMI)****Credits:** 1

This course analyzes the configuring and programming of Human Machine Interface (HMI) devices such as panel view touch screens. Students will work with the Allen Bradley FactoryTalk View Application to display and manipulate graphic objects as well as run-time files in a lab environment.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-121) and (620-122)

Complete Course Listing



**620-145 Program Controllers and Human Interfacing Modules (HIM) Devices**  
**Credits: 4**

The student will study system components and devices that make up a programmable or microprocessor system. Various applications and operations used for digital and process controls in industry will be studied. Further use of programming is expanded to include ladder logic, function flow control, and block instructions. Networking and interfacing to other computer systems and remote inputs and outputs modules are studied and applied. Human Interfacing Modules (HIM's) are studied and programmed. HIM's are setup to connect with the network or PLC's. Diagnostic troubleshooting of PLC's and HIM's is applied to real world control systems.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (620-110) and (620-115)

Complete Course Listing

**620-146 Mechanics 1**  
**Credits: 1**

This course will examine the proper use of basic hand and power tools. Drilling, tapping, saw use, and semi-precision measurement are demonstrated and performed by the student. Fastener types and specifications are explored. Students analyze and operate simple machines such as levers and pulleys, as well as gears and linkages.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-147 Mechanics 2**  
**Credits: 1**

This course is a continuation of Mechanics 1. Students engage in further shop practices, such as precision measurement, precision drilling, and basic manual milling operations. Students will examine basic print reading and design.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-148 Industrial Integration**  
**Credits: 1**

Students analyze the interconnection and communication of industrial devices in this course. Discrete and network I/O communication is examined using Robots and PLCs. Students create a basic system comprised of various industrial devices.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (620-122) and (620-127)

Complete Course Listing

**620-149 Project Planning**  
**Credits: 1**

The student examines the parameters and scope under which a project must function and be constructed. Students will engage in planning and the use of control tools such as: a Statement of Work (SOW), a Work Breakdown Schedule (WBS) and Gantt charts. These tools assist the student as they design, plan, and perform the execution of a work cell.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (620-137) and (809-196)

Complete Course Listing

**620-150 Interfacing Robotic Devices**  
**Credits: 4**

This course focuses on the integration of a complete automated robotic cell. Many component parts are interconnected in order for the cell to operate properly. Student will interface: PLC's, robots, personal computers, vision systems, sensors, motor drives, conveyors, fluid power devices, and other programmable or hard automation. Topologies for networking, architectures and protocols are covered and employed in industrial control systems. In addition, wireless network technologies, and related hardware will be explored. Student will construct, wire, program, network, troubleshoot and document the complete automated robotic cell.

**Aid Code:** 10 - Associate Degree.

**Restrictions:** Restricted to students admitted to Electro-Mechanical Technology Program.

**Pre-requisites:** (620-125) and (620-130) and (620-140)

**Co-requisites:** (620-155)

Complete Course Listing

**620-151 Automation Capstone**  
**Credits: 4**

This course focuses on the integration of a complete automated robotic cell with the many component parts interconnected in order for the cell to operate properly. Student will interface PLC's, robots, personal computers, vision systems, sensors, motor drives, conveyors, fluid power devices, and other programmable or hard automation.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (620-149) and (809-198)

Complete Course Listing

**620-152 Circuit Connection Techniques**  
**Credits: 1**

The basic construction of circuit boards is examined, as well as the acceptability of soldered components. Through hole and surface mount soldering activities, students fuse parts together with tin lead solder and lead free solder techniques.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (620-119)

Complete Course Listing

**620-155 Automated Robotic Cells****Credits:** 4

The student will apply the concepts of robots and automation by building a small automation system. This automation cell will be accomplished within the framework of an assigned team of students. Student will apply learned concepts studied in previous classes. These concepts will assist in building, testing, and running their automated work cell. Student will develop, and apply project planning, time management and cooperative methods with their team members to build their work cell. Student will learn how to design and make parts for this project. They also will specify and purchase parts as well as, analyze system malfunctions, which may occur to the modular level. Student will practice the skills needed to interface and make repairs. By using such organizational tools as WBS and Gantt charts, the student team will learn how to finish the project on time and on budget.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Electro-Mechanical Technology Program.**Pre-requisites:** (620-120) and (620-130) and (620-140)**Co-requisites:** (620-150)

Complete Course Listing

**620-164 Safety 1****Credits:** 1

This course focuses on workplace safety, health and inspections. OSHA standards are introduced, how to prepare for and conduct inspections, how to become acutely aware of various hazards and ways in which to effectively communicate to others that they exist. Students will demonstrate the proper use of personal protective equipment (PPE), and fire and safety emergency responsiveness.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-165 Safety 2****Credits:** 1

This course is a continuation of Safety 1. Specific topics that are introduced and demonstrated include electrical safety around how to safely use various power tools and hand tools, logout/tagout procedures, ergonomics, and how to properly work with bloodborne pathogens.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-164)

Complete Course Listing

**620-166 Conveyor Systems 1****Credits:** 1

In this course, students examine multiple facets of different conveyor systems, components and operation. Students analyze the different aspects of a conveyor system and demonstrate proper fittings for components and operational procedures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-167 Conveyor Systems 2****Credits:** 1

In this course, students examine multiple facets of different conveyor systems, including the screw, flat belt, and roller conveyors. While incorporating conveyors safety procedures, students will analyze the different systems used to make up an effective belt conveyor and be able to apply standard applications, preventive maintenance, and repair principles when working with various types of conveyors.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-168 Lathes****Credits:** 1

This course examines the basics of lathe fabrication processes that are common to the Electro Mechanical and Industrial Maintenance field. Students will demonstrate the basics of metal turning techniques.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-169 Mills****Credits:** 1

This course is designed to outline for students the basics of milling fabrication processes that are common to the Electro-Mechanical and Industrial Maintenance field. Through demonstration and practice, students will be able to identify machine parts, analyze their function, and perform simple milling operations. Students will be able to demonstrate the basic use of mills, related safety, maintenance, metal cutting theory, cutting tools, and work holding for the mill.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-170 Valves, Gaskets and Seals****Credits:** 1

Students will examine and demonstrate standard procedures related to installing, maintaining, and replacing valves, gaskets, and seals in industrial applications.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-171 Human Relations in the Industrial Setting****Credits:** 2

This course is designed to give students insight into how an individual's behaviors and abilities affect their relationships with others at work and with customers. Areas stressed include presenting a professional image in seeking employment, developing a positive work attitude, reliability on the job and an awareness of personal adjustments required for gainful employment.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-172 Machine Setup & Installation****Credits:** 1

This course examines standard applications of rigging, machine leveling, and alignment of shafts, couplings, and bearings. Students will be able to identify types of rigging equipment, estimate loads, and demonstrate proper construction of ropes and slings while practicing standard safety procedures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-173 Blueprint Reading for Machine Prints****Credits:** 1

This course is designed to demonstrate the basics of machine print reading. Students will be able to analyze and recognize unique features of machining assembly prints. The student will interpret orthographic projection drawings including sectional, auxiliary views, threads, surface finishes, geometric dimensions, and tolerances.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-174 Mechanical Power Transmission****Credits:** 1

This course engages students in the application of gears, belts, bearings, chain drives, and lubrication processes used in industry. Students will interpret and apply the basic industry standard principles of operation, installation, preventative maintenance, and repair procedures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-175 Servomechanisms 1****Credits:** 1

Servomechanisms employ closed-loop feedback to improve control of various automated systems. In this course, students analyze principles of open and closed-loop systems, including the fundamental coverage of PID control modes. Feedback sensing devices such as encoders, tachometers, resolvers and LVDTs are examined, and the operation of position and velocity control systems is demonstrated in the lab. Experiments are conducted on DC motors, AC motors, stepper motors, and hydraulic servo control systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-121)

Complete Course Listing

**620-702 Mechatronic Principles****Credits:** 2

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-703 DC Electricity for Mechatronics****Credits:** 1

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-704 AC Electricity for Mechatronics****Credits:** 1

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-705 Motors & Motor Control for Mechatronics****Credits:** 2

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-706 Electrical Codes for Mechatronics****Credits:** 1

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-707 Welding Basics for Mechatronics****Credits:** 1

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-708 Fluid Power Systems for Mechatronic Apprentices****Credits:** 2

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-709 Servos and Drives for Mechatronics****Credits:** 1

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-710 Power Transmission Systems for Mechatronics****Credits:** 1

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-711 Machining Concepts for Mechatronics****Credits:** 2

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing



**620-712 Introduction to Programmable Logic Controllers****Credits:** 2

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-714 HMI Technologies & PLC Applications for Mechatronics****Credits:** 2

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-715 Introduction to Robotic Systems for Mechatronics****Credits:** 2

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**620-716 Introduction to Robotic Integration****Credits:** 3

This program configuration represents a statewide model for class cohorts in the related instruction portion of the mechatronics technician apprenticeship. The model outlines related instruction for 3 years and 6 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, demonstration, shop, and hands-on learning aligned with DWD-BAS apprenticeship training standards. This model is designed for class meetings one day per week, and every week during 2 semesters per year. This model provides foundational skills apprentices will need in on-the-job learning during the final 2 years of their apprenticeship. The model provides 288 hours of learning in each of the following disciplines: mechanical, electrical, and automation. This model aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified by an industry validated DACUM and Exhibit A work processes approved by the state trade committee. Supporting documentation may be found in the BAS Mechatronics Technician Job Book pending in 2016-7. The model also aligns common and consistent course numbers that colleges may use across the WTCS (along with recommended hours, credits and pre-requisites). This curriculum model may be interpreted and implemented by the colleges as required to meet local needs and in support of local work processes approved by the trade and DWD-BAS.

**Aid Code:** 50 - Apprentice.

Complete Course Listing



**620-900 Safety 1****Credits:** 1

This course focuses on workplace safety, health and inspections. OSHA standards are introduced, how to prepare for and conduct inspections, how to become acutely aware of various hazards and ways in which to effectively communicate to others that they exist. Students will demonstrate the proper use of personal protective equipment (PPE), and fire and safety emergency responsiveness.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-902****Credits:** 1

This course is designed for students enrolled in industrial maintenance, electro-mechanical technology, and automation technology programs at BTC. Students explore strategies to develop study skills for success in their programs. Through hands-on experience, learners apply study skills, learn how to think critically, and use information resources and technology. Focus will be on the use of college resources, goal setting, time management, flexible learning success strategies, and Flex Lab processes and procedures at the Advanced Manufacturing Training Center. Students will complete this course prior to starting other courses in their program.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-903****Credits:** 1

This course is an introduction to Integrated Manufacturing Systems, providing context for future coursework in maintenance and automation programs. Students analyze the sequence of operations in a manufacturing system, explore fundamentals of PLC programming, and apply a troubleshooting methodology that is used in sequencing machines.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-904****Credits:** 1

This course continues the study of pneumatics. Emphasis is placed on the electrical controls of pneumatic circuits while students analyze the operation of sequencing circuits and apply troubleshooting principles to identify faulted components.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-117)

Complete Course Listing

**620-905****Credits:** 1

This course is a continuation of Machine Setup & Installation 1. By the end of this course, students will be able to move a load with a crane, level and align equipment, and set anchoring devices. Emphasis is placed on standard safety procedures for all machine setup operations.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-172)

Complete Course Listing

**620-906****Credits:** 1

This course continues the study of hydraulics. Students will analyze the design and function of hydraulic pumps, flow control valves, and actuators.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-117)

Complete Course Listing

**620-907****Credits:** 1

In this course, students examine characteristics of fluid conductors, selection of hydraulic fluids, troubleshooting of hydraulic systems, and repair of hydraulic components.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-906)

Complete Course Listing

**620-908****Credits:** 1

This course explores basic principles of maintenance management, including preventive maintenance, predictive maintenance, work order management, and project management. Students perform the duties of scheduling, purchasing, inventory management, and stakeholder communication with internal and external customers.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-909****Credits:** 1

This course introduces students to basic Lean Manufacturing principles with an emphasis on quality control of maintenance operations. Students identify eight types of waste in manufacturing, perform a 5S process, and utilize Total Productive Maintenance (TPM) methodologies to monitor and improve overall equipment effectiveness (OEE).

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**620-910****Credits:** 1

In this course, students examine single and 3-phase AC induction motor performance and operating characteristics, and three-phase power systems.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-106)

Complete Course Listing

**620-911****Credits:** 1

In this course, students build on skills obtained in Variable Speed Drives 1 to program and troubleshoot AC drives.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-107)

Complete Course Listing

**620-913****Credits:** 1

This course is a continuation of Servomechanisms 1. Students build servo systems from schematics, demonstrate calibration and span procedures for instrumentation, and program servo motion systems to complete basic motion tasks.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-175)

Complete Course Listing

**620-914****Credits:** 1

Students identify the basic components of Supervisory Control and Data Acquisition (SCADA). Current manufacturer specific software is used to monitor and operate servo controllers and PID controllers from an HMI screen. In addition, students create and configure data trending tools and run-time files.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-144)

Complete Course Listing

**620-915****Credits:** 2

This capstone course challenges students to apply the full range of their Automation Engineering Technology skills in order to perform advanced troubleshooting and repair of various faults in a fully integrated manufacturing system. Students combine and apply their knowledge and skill in electrical, hydraulic and pneumatic systems, as well as PLC programming and robot control.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-122) and (620-127)

Complete Course Listing

## Electronic Technology (605)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**605-102 Fundamentals of DC Circuits****Credits:** 3

This course is a study of the basic theories, concepts, elements, and principles of DC circuits. The student advances from simple to complex circuits. Topics covered include Ohm's Law, series and parallel circuits, circuit theorems and circuit analysis. The course combines both lecture and laboratory work.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 804-113

Complete Course Listing

**605-104 Fundamentals of AC Circuits****Credits:** 3

This course is a study of the basic theories, concepts, elements, and principles of AC circuits. The student advances from simple to complex circuits. Topics covered include reactance, impedance, resonance, transformers, inductors, and capacitors. The course combines both lecture and laboratory work.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (605-102)**Co-requisites:** (804-114)

Complete Course Listing

**605-106 Analog Circuits****Credits:** 3

This course provides the student with the concepts and fundamental circuit design material to create several types of analog circuits. This course also explores the principles and concepts needed for solid-state devices to operate correctly. Course study includes: the use of solid-state devices such as diodes, transistors field-effect devices, and op-amps. Areas covered include: amplification, comparing, summing, wave shaping, regulating, and oscillation circuits. Analog to digital conversion and several types of integrated circuits are investigated and applied. Characteristics and application of each device type is verified in laboratory experiments.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (605-102)**Co-requisites:** (605-104)

Complete Course Listing

## Emergency Medical Service (531)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**531-102 Emergency Procedure-Work Place****Credits:** 1

This course prepares the individual for common emergencies in the work place. It includes the American Heart Association Adult, Child and Infant CPR, First Aid and Fire Prevention and Safety.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**531-104 EMT Basic/FPT****Credits:** 4

The course is for Fire Protection Technician program students only. This course prepares individuals to care for patients at accident scenes and transport by ambulance to the hospital under medical direction. The course emphasizes emergency skills such as managing respiratory and cardiac emergencies, medical emergencies, trauma emergencies and patient assessment, and teaches these skills in a job-related context. The National Registry of EMT's test is required at the completion of the course for licensure in the State of Wisconsin.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 531 434

Complete Course Listing

**531-105 EMT Intermediate Technician****Credits:** 3

The EMT Intermediate Technician course will take you to the next level of training after EMT-Basic. Students will learn clinical decision making skills, basic pharmacology, intravenous therapy, and management of cardiovascular, diabetic, drug overdose, and shock cases. The class includes a combination of classroom and practical skills training that includes clinical time in a hospital setting. Demonstrated skill competencies are required to successfully complete this class in order to be eligible to take the Wisconsin State licensure examination. EMT-Basic and a current EMT-B license are pre-requisites for this class.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**531-110 Emerg Med Tech/EMT-B****Credits:** 5

Prepares students for the National Registry of EMTs Emergency Medical Technician level test which leads to licensure as an EMT in Wisconsin. The course emphasizes emergency medical skills needed to stabilize both trauma and medical patients in a prehospital setting within the guidelines of Medical Control. The course covers basic anatomy and physiology, patient and scene assessment, patient stabilization and intervention techniques, medical-legal aspects, and patient packaging and transportation to the hospital. This course is a prerequisite for Advanced EMT and includes 180 hours of instruction that includes lecture, practical skill development, simulation learning, and clinical time. The course includes the American Heart Association Healthcare Provider CPR as a course introduction. Failure to successfully complete this portion of the course disqualifies students from continuing. There is an additional course fee that covers required class materials with the exception of books. This course fee is non refundable after the first day of class.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Writing Skills, 44 or COMPASS Writing Skills, 070 or ACT English, 18 or Next Gen AccuPlacer Writng, 255 or SAT Verbal, 330 or AccuPlacer Sentence Skills, 083 or Test Waived-College Degree or 831-103 or 831-103 or 801-136 or 801-195) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 251 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or 838-104 or 838-104 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-109 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**531-111 Advanced EMT/Int-Tech****Credits:** 4

Prepares students for the National Registry of EMTs Advanced Emergency Medical Technician level test which leads to licensure as an AEMT in Wisconsin. The course emphasizes more advanced emergency medical skills needed to stabilize both trauma and medical patients in a prehospital setting within the guidelines of Medical Control. The course covers additional anatomy and physiology needed for more advanced patient assessment and treatment skills. Patient stabilization and intervention techniques at this more advanced level are also covered. This course includes 180 hours of instruction that includes lecture, practical skill development, simulation learning, and clinical time.

**Prerequisite:** Wisconsin licensed EMT.**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**531-301 Emergency Medical Responder/Emergency Medical Technician Part 1****Credits:** 2

Provides the foundational knowledge for future Emergency Medical Technicians and Emergency Medical Responders. Topics include: basic human anatomy, performing a patient assessment, traumatic injury management, airway management, and Basic Life Support cardiac resuscitation. Upon successful completion, candidates will be eligible to participate in the National Registry of EMT's Emergency Medical Responder exams for Wisconsin EMR certification.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**531-302 Emergency Medical Technician Part 2****Credits:** 3

Advances on the foundation concepts of Part 1 to include pharmacology, pathophysiology, operating an ambulance, and medication administration. Students will also complete a clinical rotation in a hospital Emergency Department. Upon successful completion, candidates will be eligible to participate in the National Registry of EMTs Emergency Medical Technician exams for Wisconsin EMT licensure.

**Aid Code:** 30 - Short-term.**Pre-requisites:** (531-301)

Complete Course Listing

**531-304 EMT - Intermediate 99 I****Credits:** 5

Students learn advanced patient assessment, communication skills and advanced life support interventions through lecture and in class practical application. This course is the first of two class needed to meet the requirements for certification with the National Registry of Emergency Medical Technicians and educational requirements for licensure in Wisconsin.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**531-305 EMT - Intermediate 99 II****Credits:** 5

Students learn advanced patient assessment, communication skills and advanced life support interventions through lecture and clinical and field experience. This course is the second of two classes needed to meet the requirements for certification with the National Registry of Emergency Medical Technicians and educational requirements for licensure in Wisconsin.

**Aid Code:** 30 - Short-term.

Complete Course Listing

## English (851)

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**Information provided includes course descriptions by subject only.**

**For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**851-713 BSE Communications I****Credits:** 3

Introductory course includes basics of punctuation, spelling, capitalization as needed for written expression in everyday situations. Basic sentence and paragraph construction will be included.

**Aid Code:** 73 - Beg ABE (0-5.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**851-762 Communication 2****Credits:** 3

This course develops conventions of English structure, usage, mechanics and spelling in order to write and expand ideas. It includes practice in writing, correcting, and revising. The focus will be on expression of ideas through e-mails, business letters, and paragraphs. Successful completion of Communication 2 is required for progression to Communication 3.

\*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).**Pre-requisites:** (COMPASS Writing Skills, 001 or AccuPlacer Sentence Skills, 030 or Next Gen AccuPlacer Writng, 220 or ACT English, 01)

Complete Course Listing

**851-763 BSE Writing for Accuplacer****Credits:** 2

This course will provide instruction in writing skills needed to be successful on the Accuplacer writing test.

**Aid Code:** 74 - Interm ABE (6.0-8.9).

Complete Course Listing

**851-764 Communication 2 GED Review****Credits:** 3

This course develops conventions of English structure, usage, mechanics, and spelling in order to write and expand ideas. It includes practice in writing, correcting and revising for the GED test at the pre-GED level.

\*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**851-771 BSE Communication 3, GED****Credits:** 3

A continuation of Communications 2. Expansion of English structure, usage and mechanics with emphasis on writing skills needed for the essay component of the GED Writing Skills test.

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).

Complete Course Listing

**851-772 Communication 3 GED Review****Credits:** 3

This course further develops conventions of English structure, usage, mechanics, and spelling in order to write and expand ideas. It includes practice in writing, correcting, and revising for the Reasoning Through Language Arts GED test. This course may also develop communication skills as needed for the Mathematical Reasoning, Social Studies, and Science GED tests. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**851-781 Communication 3****Credits:** 2

This course will include the basic points and refinement of grammar, spelling and the writing of paragraphs and essays. Successful completion of Communication 3 with a C or better is required for progression to Intro to College Writing. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).**Pre-requisites:** (ASSET Writing Skills, 35 or COMPASS Writing Skills, 025 or ACT English, 12 or AccuPlacer Sentence Skills, 046 or Next Gen AccuPlacer Writng, 230 or 851-762)

Complete Course Listing

**851-795****Credits:** 1

A small group and individualized instruction course that helps students develop college-level writing skills. Emphasizes writing process strategies. Must be taken concurrently with Written Communication or English Composition 1.

**Aid Code:** 77 - ASE Developmental.**Pre-requisites:** (ACT English, 15 or COMPASS Writing Skills, 038 or SAT Writing, 290 or AccuPlacer Sentence Skills, 063 or Next Gen AccuPlacer Writing, 242 or 851-781)**Co-requisites:** 801-195 or 801-136)

Complete Course Listing

**851-798****Credits:** 1

A small group and individualized instruction course that helps students develop precollege writing skills. Emphasizes writing conventions (grammar, punctuation, capitalization, spelling) and sentence and paragraph skills. Must be taken concurrently with Intro to College Writing.

**Aid Code:** 77 - ASE Developmental.**Pre-requisites:** (831-103) and (COMPASS Writing Skills, 37 or ACT English, 14 or SAT Verbal, 270 or AccuPlacer Sentence Skills, 62 or Next Gen AccuPlacer Writing, 241)

Complete Course Listing

## English Language Learners (861)

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Information provided includes course descriptions by subject only.

For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**861-701 English as a Second Language, Advanced Communication****Credits:** 3

Learners will discriminate common stress patterns, reductions, intonation, pitch patterns, and thought groups. Learners will utilize rules of grammar to form affirmative and negative statements and questions using simple, continuous, perfect and perfect continuous tenses. The use of conditional sentences and active/passive voice will be explored. Learners will be expected to use sustained speech to participate in discussions about unfamiliar topics, share experiential stories, and present oral reports of various types.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-702 ELL College Transitions Course****Credits:** 1

This 36-hour course will assist English Language Learners (ELL) in bridging the gap between ELL program completion and readiness for success in a postsecondary program. Students will develop basic computer and academic skills, as well as identify and explore career interests. Students must have instructor recommendation to enroll.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-704 English as a Second Language, Advanced Mathematics****Credits:** 3

This course focuses on the application of skills to solve word problems. Learners will apply concepts of whole numbers, fractions, decimals, percents, proportion, algebra, and geometry to solve multiple step word problems.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-705 English as a Second Language, Advanced****Credits:** 3

Learners in this course will analyze the systems in the world of work in the U.S. including chain of command, steps to filing a grievance, resolution of discriminatory practices, insurance options, and networking. All learners will develop resumes and practice writing cover letters as well as participate in mock interviews. Career options will be explored using a variety of materials and techniques.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-708 English as a Second Language, Advanced Reading****Credits:** 3

Learners will demonstrate comprehension of a variety of written work including short stories, consumer warnings, software instructions, newspapers, magazines, and college catalogues. Activities include identification of main idea and details, making inferences, identification of author's bias, and the identification of characters, setting, and plot. The writing process will be used to construct multiple-paragraph compositions. Learners will use reference tools including the dictionary, thesaurus, atlas, encyclopedia, software and the Internet.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-711 English as a Second Language, Beginning Literacy, Communication****Credits:** 3

Instruction and practice in the use of formal and informal conversational language. Students build vocabulary and learn to use numbers, emergency and health language, identify types of jobs and classroom objects. Basic pronunciation, speaking, and listening strategies are developed. Basic grammar and writing skills are introduced and practiced. Programs are infused with and enhanced by technology.

**Aid Code:** 75 - ESL W/Instrl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-714 English as a Second Language, Beginning Literacy, Mathematics****Credits:** 3

Develops language and skills needed for beginning math. Topics include number concepts, mathematical language and whole numbers. This level introduces fractions, decimals, measurements and geometric shapes. Students develop critical thinking skills to problem solve, perform computations, estimate results, interpret and develop data, work with appropriate technology and apply mathematics to real-world situations.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing



**861-715 English as a Second Language, Beginning Literacy****Credits:** 3

Students develop basic language skills in the area of speaking, listening, reading and writing in the context of real-life survival skills. It is aimed at developing the listening comprehension and oral skills of beginning level learners of English. Students at this level function minimally, if at all, in English.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing**861-718 English as a Second Language, Beginning Literacy, Reading****Credits:** 3

Instruction to teach discrimination and correct orientation of the English alphabet, to introduce symbol/sound relationships, and the meaning of common signs and symbols. Students learn to recognize personal information print, use maps, calendars, and picture dictionaries. Students also begin to develop basic comprehension strategies at this level.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing**861-731 English as a Second Language, Low Beginning, Communication****Credits:** 3

Instruction to improve basic communication skills including: speaking, listening, pronunciation, writing, and grammar. Students learn to write and speak using simple past, present and future verb forms, generate simple affirmative and negative statements and questions, discriminate sounds, and respond to simple imperatives. Computer technology will assist students.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-734 English as a Second Language, Low Beginning, Mathematics****Credits:** 3

Reviews ESL Beginning Math content and develops language and skills needed for Beginning/Intermediate Math. Concepts covered include fractions, decimals, measurements, mathematical language, percents, ratios and proportions. This level introduces basic algebra and geometry concepts. Students will use critical thinking skills to problem solve, perform computations, estimate results, interpret and develop data, work with appropriate technology and apply mathematics to real-world situations.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-735 English as a Second Language, Low Beginning****Credits:** 3

Classes at this level provide relevant language in real-life contexts. This class uses an experience centered approach to give student survival skills as quickly as possible. This program provides plenty of opportunity to use language, while developing grammatical skills. Students at this level will begin to form simple sentences and be able to communicate with others. Students learn about standard social norms in the United States, the work ethic in the United States, and how to apply basic study skills.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing**861-738 English as a Second Language, Low Beginning, Reading****Credits:** 3

Instruction to improve basic reading skills and expand vocabulary. Students learn to comprehend and respond to a range of printed material, employ a variety of comprehension strategies, recognize formal and informal language, and develop fluency.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing**861-751 English as a Second Language, High Beginning, Communication****Credits:** 3

Instruction to improve speaking, listening, pronunciation, writing, and grammar skills. Students learn to use the writing process to compose short paragraphs and workplace reports, develop an awareness of language patterns, utilize rules of grammar, use formal and informal conversational language and respond to multi-step process directions. Computer technology is used to enhance the learning experience. Students will learn to use word processing tools.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing**861-754 English as a Second Language, High Beginning, Math****Credits:** 3

This course introduces basic concepts and language skills needed in algebra and geometry such as signed numbers, powers and roots, algebraic expressions, equations, rectangular coordinates, polynomials, angles, triangles and plane and solid figures. This course allows the student to work on areas in math that they need to be successful in later course work or in their career.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing



**861-755 English as a Second Language, High Beginning****Credits: 3**

Students learn about school services and how to access them. They will participate in formal and informal conversations about legal and basic human rights. Students learn to write cover letters, resumes, and to complete job applications. Development of study skills is stressed, and students will learn to apply learning and test taking skills and strategies and actively participate in the learning process.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-758 English as a Second Language, High Beginning Reading****Credits: 3**

Instruction to improve reading skills and expand vocabulary. Students improve comprehension skills and learn to respond critically to a range of printed material. Employability vocabulary and the use of workplace terminology are expanded. Students develop greater fluency and increase their reading rate.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-771 English as a Second Language, Low Intermediate Communication****Credits: 3**

Learners will identify sounds of English, use basic pronunciation strategies, and discriminate speech. Formal and informal conversational language skills will be developed through participation in a variety of activities. Learners will use sustained speech to give short explanations, descriptions, and process directions.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-774 English as a Second Language, Low Intermediate Mathematics****Credits: 3**

Learners will use critical thinking skills to solve problems using fractions, decimals, percents, and proportions. Basic algebra and geometry concepts will be introduced.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-775 English as a Second Language, Low Intermediate****Credits: 3**

Learners will use pre-employment resources such as classified ads, employment agencies, web sites and the Rock County Job Center to complete a variety of assignments and tasks. Employer expectations such as punctuality, attitude, team work, and appreciation for diversity will be discussed. Learners will participate in activities to prepare for interviews.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-778 English as a Second Language, Low Intermediate Reading****Credits: 3**

Learners will demonstrate comprehension of a range of printed materials including road signs, safety signs, newspaper articles, rhythm chants, short narratives, and fairy tales. Comprehension strategies studies will include recognition of compound words, homonyms, prefixes, and suffixes. Learners will demonstrate an awareness of a variety of language patterns and utilize rules of grammar to form statements and questions in simple and continuous tenses.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-791 English as a Second Language, High Intermediate Communication****Credits: 3**

Learners will discriminate speech, display active listening skills, and increase survival language. Formal and informal conversational language will be practiced. Learners will be expected to use sustained speech to generate two-person dialogues about familiar topics and share experiential stories. There will be instruction and practice using a variety of grammatical structures including the perfect tenses and tag questions.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-794 English as a Second Language, High Intermediate Mathematics****Credits: 3**

Learners will be introduced to basic concepts and language skills needed in algebra and geometry such as signed numbers, equations, rectangular coordinates, polynomials, angles, triangles, and plane and solid figures.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-795 English as a Second Language, High Intermediate****Credits: 3**

Learners will identify the raise-promotion process, discuss the purpose of personnel files, discuss employer expectations, and identify discriminatory practices. Interview etiquette will be discussed and practiced. Activities will lead to greater understanding of American cultural practices such as volunteerism, competitiveness, parenting, and neighborhood interaction.

**Aid Code:** 75 - ESL W/Instl Area 861.**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-798 English as a Second Language, High Intermediate Reading****Credits: 3**

Learners will analyze a variety of printed material and identify main ideas, supporting details, predict outcomes, make inferences, and draw conclusions. Sources will include textbooks, newspapers, magazines, school notices, schedules, nutrition labels, and consumer instructions. Learners will use the writing process to compose organized paragraphs.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

## Environmental (506)

Information provided includes course descriptions by subject only.

For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

#### **506-101 Beginning Laboratory Skills**

**Credits:** 3

This class introduces general laboratory concepts and procedures. Emphasis will be placed on laboratory safety, equipment utilization, and maintenance. An introduction to scientific inquiry will be addressed. Proper techniques in specimen collection, record keeping, and quality control will be introduced. Basic laboratory mathematics will be discussed and applied.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (804-106 or 804-107)

[Complete Course Listing](#)

#### **506-102 Intermediate Laboratory Skills**

**Credits:** 3

The learner will begin to apply laboratory procedures and the scientific method to the analysis of samples and the performance of simple experiments. The learner will develop and apply data analysis and management techniques. The learner will develop the necessary methodology to deal with chemical and bio-hazardous materials.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (506-103 or 513-113)

[Complete Course Listing](#)

#### **506-103 Basic Laboratory Skills II**

**Credits:** 2

This class continues the introduction of general laboratory concepts and procedures learned in 513-110 Basic Lab Skills. Emphasis will be placed on laboratory safety, equipment, utilization, and maintenance. An introduction to scientific inquiry will be addressed. Proper techniques in specimen collection, record keeping, and quality control will be introduced. Basic laboratory mathematics will be discussed and applied.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** 513-110

[Complete Course Listing](#)

#### **506-105 Quality Concepts in Laboratories**

**Credits:** 3

The student will become familiar with quality concepts and their application within the laboratory environment. This will include understanding of the meaning and benefits of quality, quality systems and processes, and the cost/impact of quality. How to apply problem solving skills for continuous improvement will be explored.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

#### **506-108 Laboratory Safety and Hazardous Materials**

**Credits:** 1

The learner will become familiar with the fundamental aspects of safety and hazardous materials in the laboratory environment, as well as safety/hazardous materials regulations and their applications. The learner will develop an awareness of their responsibility for safety within the workplace.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

#### **506-109 Data Management for Laboratory Assistants**

**Credits:** 1

This class introduces the fundamental concepts and approaches for data management in a laboratory environment. Both manual and automated data collection and management will be covered with particular emphasis on "best practice" approaches for reliability, accuracy, and integrity within data management systems and their use.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

#### **506-111 Food Microbiology**

**Credits:** 4

This course focuses on interactions of microorganisms and our food supply as it pertains to food processing and packaging in order to control food-borne disease, infections and toxins. Students will analyze what conditions affect the growth, death and survival of microorganisms in food. Students isolate and identify the primary food pathogens. Students will experience both positive interactions with microbes (such as fermentation) and negative interactions (such as spoilage and disease).

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (806-199) and (806-197)

[Complete Course Listing](#)

#### **506-112 Food and Nutritional Science**

**Credits:** 3

This course examines the biochemical processes of digestion and absorption as it pertains to the macromolecules, carbohydrates, lipids, and amino acids. Learners will analyze enzymes, vitamins, and co-factors. Learners will define the most common sources and functions of nutrients and nutritional needs by examining such items as caloric contents in food. Contemporary and emerging issues in nutrition will be examined.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** 806-199

[Complete Course Listing](#)

#### **506-113 Excel and Access for the Laboratory**

**Credits:** 3

In this course students input data into Excel and Access, as well as analyze data using the software and its specific features. Students will learn how to control and share the data they have created. Students research different types of labs that utilize this software, and how data from these programs is and can be incorporated into a Laboratory Information Management System (LIMS).

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

**506-114 Introduction to the USDA and FDA****Credits: 2**

The United States Department of Agriculture (USDA) and Food and Drug Administration (FDA) are the major governing bodies involved in regulating our food supply. In this course, students will study the establishment of these government entities and analyze how they coexist. Students will define which areas of our food supply are governed by each entity. Learners will study the types of documents each facility must maintain in accordance with these governing bodies' regulations. Students will have the opportunity to participate in mock audits of a variety of production facilities during the course.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**506-115 Food Production Regulations / HACCP, GFSI, FSMA****Credits: 2**

The regulations governing food production are a necessary part of ensuring safety of our food supply. The primary focus of this course will be for students to learn and apply the Hazard Analysis Critical Control Point (HACCP) system. Students will explore the relevant elements and the application of both the Global Food Safety Initiative (GFSI) and the Food Safety Modernization Act (FSMA). Students will evaluate how each regulation can influence the development of a strong quality assurance program within a food production facility. Upon completion of the course, students will be prepared to become HACCP- certified. (The certification is taken outside of the course).

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**506-117 Food Laboratory Occupational Experience****Credits: 2**

Students will be placed in a field experience where they will participate in the day to day operations of a food lab or food production facility. Students will be matched with an employee mentor at the facility and demonstrate skills in both the technical side of the industry as well as professional work behaviors.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (806-199) and (806-197)

Complete Course Listing

**506-120 ServSafe Certification Preparation****Credits: 1**

This course will introduce the learners to food preparation and storage conditions that promote safety to the consumer. Learners will prepare for and take a practice test of the ServSafe Certification. Upon successful completion of the course, students may elect to take the ServSafe Certification exam.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Farm Business Management (090)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****090-303 Agricultural Commodity Marketing for Farm Operators****Credits: 1**

Learners will develop an understanding of the principles of marketing relative to basic economic theory. Learners will analyze a variety of topics, including product differentiation, direct marketing, and competitive advantage. Learners will examine the marketing process from production through delivery and ultimately to the consumer.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**090-305 Nutrient Management Planning for Farm Operators****Credits: 3**

Students focus on profitable crop production methods using commercial products, nutrient credits, and rotational practices. Students learn how to interpret soil test reports, balance soil pH, meet nutrient requirements, and make product recommendations based upon economic, environmental, and legal criteria. Students will study field mapping based on global positioning systems and variable rate technology.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**090-381 Operating the Farm Business****Credits: 3**

Emphasizes the management skills and concepts necessary for the first year student to continue farming with today's changing technology and farm business financing. Special emphasis is given to establishing and recording farm business and family goals. The student will organize and maintain the farm business records, as well as interpret and analyze the records to assist in making sound farm business management decisions. Each student's farming operation is assessed and plans are developed based on needs, goals, and objectives. Students will evaluate their goals and objectives upon completion of the course.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**090-382 Soils Management for Farm Operators****Credits: 3**

Instruction is provided on preparation and implementation of a land-use plan, and soil testing procedures and reports. Students will receive instruction on fertilizer recommendations and budgets. Included are instruction on the application of farm manures, chemicals, soil conservation practices, and the management and safe use of farm machinery and equipment. Soil management emphasizes the analysis of the farm business and planning cropping strategies to meet the student's needs.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**090-383 Crop Management for Farm Operators****Credits:** 3

Instruction is provided on all phases of crop production, management and economics. Specific topics relate to variety, selection, planning, pest control, harvesting, storage, and marketing. In addition, the cropping program is related to the total farm enterprise on a short-term and long-term basis. Crop management emphasizes the analysis of the farming business and planning of cropping practices and strategies to meet student's needs.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**090-384 Livestock Nutrition for Farm Operators****Credits:** 3

This course emphasizes the skills, techniques and concepts necessary for sound feeding management. Feed values, pricing, terminology, requirements, and consumption are covered. Evaluation of feed tag labels, base feeds and feeding programs are also covered. Attention is given to the metabolic diseases of lactating animals. Livestock feeding efficiency is measured by use of the farm business analysis.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**090-385 Livestock Management for Farm Operators****Credits:** 3

Livestock management provides instruction on the various aspects of selection, breeding, herd health, raising of replacement stock, and marketing of livestock and livestock products. It includes the selection, operation, and maintenance of farm buildings and milking, feeding, ventilation and manure handling equipment. Efficiency of the livestock program will be measured through use of the farm business analysis.

**Aid Code:** 30 - Short-term.

Complete Course Listing

**090-386 Records & Business Management for Farm Operators****Credits:** 3

Instruction emphasizes the practical use of a farm record system in managing the farm through farm and financial analysis. It includes the establishment of farm business goals, selection, and use of farm credit, farm business arrangements, farm estate planning, and farm income taxes. Instruction is provided on the use of computers and/or computer records and farm financial analysis of the farm business. Production and financial decisions will be based on the student's farm business analysis.

**Aid Code:** 30 - Short-term.

Complete Course Listing

## Fire Technology (503)

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Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**503-108 Bldg Constr & Fire Ordinances****Credits:** 4

The basic principles of structural design, masonry, frame, veneer, structural steel and reinforced construction are studied, with fire ordinances that apply during construction.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-109 Intro to Hazardous Materials****Credits:** 3

This course provides an introduction to the Hazardous materials problem by presenting the foundation needed to go further in the study of hazardous materials, such as "hands on" courses and incident-command courses. The chemistry presented in this course is designed to be the minimum a firefighter will need to understand and recognize in each hazard class. In general, each hazard class shows what a firefighter can expect in fire and non-fire situations.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-113 Supervisory Techniques-FS****Credits:** 3

This course is designed to give the student an over view of such supervisory skills as leadership and interpersonal skills, planning, staffing, organizing, and control at the first-time supervision level. The duties and responsibilities of supervisors, the role of supervision in an organization and making the transition to supervisor are also included.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-115 Handling Hazardous Materials****Credits:** 3

This is a study of the properties, derivations, and uses of explosives and other dangerous chemicals such as flammable liquids, flammable solids, oxidizing materials, corrosive liquids and solids, compressed gasses, radioactive materials, poisons and their modes of transportation and storage. The procedures as to dealing with these chemicals on the foreground are also studied.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-117 Fire Prevention/Systems****Credits:** 4

This course discusses the organization and function of fire prevention and fire protection systems. Topics include inspection, surveying and mapping procedures, recommendations for correction of fire hazards, engineering as a solution to fire hazards, code enforcement at the federal, state, and local levels, public relations as affected by fire prevention, portable fire extinguisher equipment, sprinkler systems, standpipe systems, protection systems for special hazards, and fire alarm and protection systems. Students will visit local facilities to make mock inspections and to see how fire protection equipment and systems work in order that critical appraisals can be made.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-118****Credits:** 3

Fire fighting problems are presented that are commonly encountered by the firefighter at the company level. Fundamental strategy and methods of attack employed for each fire problem presented are thoroughly reviewed.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing

**503-122 Fire Service Hydraulics****Credits:** 3

This course is designed to give the student a basic knowledge of hydraulics relative to the fire service field. The theoretical aspects as well as the practical fire ground approach is studied.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing

**503-125 Emergency Medical Technician Fundamentals****Credits:** 2

This 2 credit, 8 week course covers the basics of the Emergency Medical Technician-Basic certification course to include CPR, airways, anatomy, hazmat response requirements, lifting and moving patients, incident command, and other technical information. It is the first part of a two course system to prepare students for national certification testing for EMT-Basic.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or ASSET Numerical Skills, 40 or Test Waived-College Degree or 834-109 or 834-109 or 804-107 or (AccuPlacer Arithmetic, 089 or AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030)) and (COMPASS Writing Skills, 070 or ACT English, 18 or ASSET Writing Skills, 44 or AccuPlacer Sentence Skills, 083 or Test Waived-College Degree or 851-782 or 851-782 or 851-783 or 851-783 or 831-103 or 831-103 or 801-195) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or 838-104 or 838-104 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**503-126 Fire Department Administration****Credits:** 3

The scope and functions of administrative management personnel in the fire department are studied. Discussions include fire service role in the community, selection, training and advancement, line and staff functions, and developing and conducting short courses on fire protection subjects.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing

**503-128 Emergency Medical Technician Applications****Credits:** 3

This course is an extension of, and completion of, the EMT Fundamental course. This course covers the bulk of the Emergency Medical Technician-Basic certification course to include the handling of cervical and spine injuries, burn injuries, heart and breathing related problems, shock, and other trauma injuries. This course includes several lab days to practice and perfect skills, clinical time, and extensive hands-on activities. This course prepares students for national certification testing for EMT-Basic. Admittance into this course must be within 2 years of completing Course # 503-125, EMT Fundamentals.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (503-125)  
Complete Course Listing

**503-135****Credits:** 3

Problems and techniques of fire and arson investigation are studied with emphasis on the application and assistance of various aids to the investigation.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing

**503-139****Credits:** 3

Provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; and fire service nomenclature.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing

**503-142 Fire Fighting Principles****Credits:** 4

Describes basic fire behavior, techniques used to control structural and related fire emergencies, and life safety practices. Students perform all practical evolutions necessary to control and extinguish fires and otherwise meet all requirements for Firefighter I certification with the State of Wisconsin.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** 503 721)

**Co-requisites:** (503-153

Complete Course Listing

**503-143 Building Construction for Fire Protection****Credits:** 3

Provides the components of building construction that relate to fire and life safety.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing



**503-144 Direct Independ Research I****Credits:** 3

This course is designed to allow a student to research and dissect a problem area in Fire Science.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-146 Direct Independ Research II****Credits:** 2

This course is designed to allow a student to research and dissect a second problem area in Fire Science.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-147 Fire Protection Systems****Credits:** 4

Provides information relating to the features of design and operation of fire detection and suppression systems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-148 Tactical Prob & Disaster Plan****Credits:** 3

This course allows the student to make knowledgeable decisions regarding fire ground tactics both from a battalion and company level, and provides insight into unusual circumstances often encountered in the fire service. The student will also learn the procedures used in the development of disaster planning and the relationship between various local, state, and federal agencies from an administrative viewpoint.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-150 Personnel Mgt For Fire Service****Credits:** 3

Students need to understand how officers and personnel units work together to manage firefighters. This course presents basic ideas that all officers need to effectively manage personnel activities.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-151 Fire Prevention****Credits:** 4

Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, and identification and correction of fire hazards.

Meets all requirements for Fire Inspector I certification with the State of Wisconsin.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-153 Hazardous Materials Awareness & Operations****Credits:** 1

In this course, students will learn characteristics relating to hazardous materials including problems of recognition and defensive operations. The course is designed to prepare students for the Hazardous Materials Awareness and Operations level of NFPA 472.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 503 780)**Co-requisites:** (503-142

Complete Course Listing

**503-154 Hazardous Materials Chemistry****Credits:** 2

This course provides basic chemistry relating to the categories of hazardous materials including recognition, identification, reactivity, and health hazards encountered by emergency services.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-156 Strategies, Tactics & Inc Mgmt****Credits:** 4

Provides an in-depth analysis of the principles of emergency response through utilization of an incident management system. Prepares students to pursue current national ICS training requirements.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-157 Fire Investigation****Credits:** 3

Provides learners with the fundamentals and technical knowledge needed for proper fire scene investigations.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-159 Fire Fighting Principles II****Credits:** 2

Builds on the basic skills learned in Fire Fighting Principles with an emphasis on scene management, communication, and fire operations processes.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (503-142) and (503-153)

Complete Course Listing



**503-160 Fire Protection Technician Internship****Credits: 3**

The Fire Protection Technician Internship is designed for students who meet the required prerequisites in order to serve at district fire departments as a responder. This opportunity affords each intern with the learning and understanding of the day-to-day worklife and culture of fire service. Included in the student intern's responsibilities will be station duties of cleaning, maintenance of fire equipment and apparatus, response to EMS and fire emergencies and fire inspections under the supervision of a designated Fire Department supervisor. FPT interns may also be involved in public relations and fire prevention, responsibilities of a subordinate, chain of command, organizational requirements, and the formal and informal relationships, work climate, and complexities of fire service culture. The total time on the job as an intern is 216 hours and is designed to be served in the assigned fire station, under supervision. The shift schedule will be determined by the Fire Coordinator, student, and hosting fire department based on program outcomes and student needs but must be completed in one semester. Completion requires satisfactory reporting from assigned agency fire chief, Fire Coordinator, and a passing grade on the final portfolio submitted by the student for the internship.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (503-142 or 503-721) and (503-153) and (503-128 or 531-110)

Complete Course Listing

**503-191 Principles of Emergency Services****Credits: 2**

This course introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-192 Principles of Emergency Services Safety & Survival****Credits: 3**

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-193 Fire Protection Systems****Credits: 3**

This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-194 Fire Protection Hydraulics****Credits: 3**

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**503-195 Fire Behavior and Combustion****Credits: 3**

This 3 credit course provides an in-depth look at the combustion process and chemical reaction along with an analysis of fire behavior, principles, and theories. This course will also examine the physics of the combustion process, the products of combustion, and the effects of fire and combustion inside a structure, and the impact on the firefighter and victims who are involved in the fire environment. A key component to this course will be observations of fire and the products of combustion within scale models.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

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**Foods (303)****Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****303-331 Food Production & Service II****Credits: 4**

A continuation of the lab training in 303-330 providing the student with the opportunity to expand skills in salad preparation, short-order cookery, bakery helper, ware handler, table service, and busing. An off-campus experience may be provided to develop individual student employment objectives.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** 303 330

Complete Course Listing

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**General College - Reading (838)****Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****838-104 Introduction to College Reading****Credits: 2**

Provides learners with opportunities to develop and expand reading skills including comprehension and vocabulary. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Reading Skills, 34 or COMPASS Reading Skills, 051 or ACT Reading, 12 or AccuPlacer Reading Comp, 055 or Next Gen AccuPlacer Reading, 236 or Reading-Precollege Level Met or 858-790)  
Complete Course Listing

## General College:College Success (835)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

## General College: Comm Skills (831)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

### 831-103 Introduction to College Writing Credits: 3

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Writing Skills, 38 or COMPASS Writing Skills, 038 or ACT English, 15 or AccuPlacer Sentence Skills, 063 or Next Gen AccuPlacer Writng, 242 or Writing-Precollege Level Met or 851-781) and (AccuPlacer Reading Comp, 055 or COMPASS Reading Skills, 051 or ACT Reading, 12 or ASSET Reading Skills, 34 or Next Gen AccuPlacer Reading, 236 or Reading-Precollege Level Met or 858-790)

Complete Course Listing

## General College: Mathematics (834)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

### 834-109 Pre-Algebra Credits: 3

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra related courses. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 35 or COMPASS Pre-Algebra Skills, 025 or ACT Math, 15 or AccuPlacer Arithmetic, 050 or 854-781)

Complete Course Listing

### 834-110 Elementary Algebra with Applications Credits: 3

This course offers traditional algebra topics with applications. Learners develop algebraic problem solving techniques needed for technical problem solving and for more advanced algebraic studies. Topics include linear equations, exponents, polynomials, rational expressions, and roots and radicals. Successful completion of this course prepares learners to succeed in technical mathematics courses.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or Test Waived-College Degree or 834-109 or 834-109) or (AccuPlacer Arithmetic, 089 or (AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030) or Next Gen AccuPlacer Arithmetic, 272) or Next Gen AccuPlacer Arithmetic, 257 and Next Gen AccuPlacer QRAS, 210

Complete Course Listing

## General Studies (890)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

### 890-700 Growth, Relationships, Information & Technology Credits: 1

GRIT is a course that is designed to support students in their first semester to recognize their ability to grow and persist in college. Students will become more familiar with various academic and non-academic support services available to them such as career guidance, tutoring, financial assistance and academic counseling. Computer technology skills and college readiness skills such as time management, critical thinking/reading and student strategies will be emphasized to support student success.

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

### 890-780 BSE Study Skills - College & Vocational Credits: 2

This class is designed to assist new and continuing students in the development of affective and coping skills, and study skills. The students develop a variety of learning strategies including test taking and note taking skills, study skills, computer skills, and organization/time management skills. The course will also include an orientation to campus, information about other support agencies, training in self-advocacy, and development of an individualized educational plan.

**Aid Code:** 78 - ASE Remedial.

Complete Course Listing

## Global Education and Services (140)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**140-101 Spanish Language & Culture****Credits:** 3

This elective course is an introduction to the basic concepts of the Spanish language and culture (This course should be taken by those with very little or no knowledge of the Spanish language and prior to taking 801-115 Intercultural Communications for Emergency Personnel).

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**140-102 Spanish Language & Culture II****Credits:** 3

This is an intermediate level course for emergency services personnel to use the Spanish language in police-related and emergency situations. Also included is an introduction to aspects of Hispanic culture that will help effectiveness in police-related and emergency situations.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 140-101

Complete Course Listing

**140-103 Spanish Lang&Culture II:Occup****Credits:** 3**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Health Education (857)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**857-771 BSE Health, HSED****Credits:** 2

Overview of general health practices needed for healthy adult and family living. Allows students seeking a Wisconsin state HSED to meet the requirements of that diploma.

**Aid Code:** 76 - HS Dip,GED,HSED (9.0-12.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**857-781 BSE Health****Credits:** 1

This course teaches the basics of health for the individual, family, and community. Mental and emotional health will be discussed as well as first aid, substance abuse, consumer health, environmental health, and death and dying. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

## Human Resources (116)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**116-102 Training and Development****Credits:** 3

This course explains the fundamentals of training and development coordination. It includes terminology, levels of learning, matching training providers with organizational needs, organizing materials and environments to maximize learning, measuring completion of objectives, and communication with employees. Through a simulation, teams will assess learning needs, develop training plans and objectives, create a training plan, use the plan to train the class on a new skill or process and then assess the transfer of knowledge afterwards. This course is a pre-requisite for Human Resource Practicum 116-138.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**116-103 Employment Law****Credits:** 3

This course introduces and explores legal issues concerning employment and their effect on the workplace. Through in-depth case analyses, oral presentations and debates, learners will examine the intricacies of Federal and Wisconsin Equal Employment Opportunity laws. Topics include legislation and Supreme Court decisions related to civil rights, age discrimination, disabilities, pay equity, affirmative action, etc.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (801-195)

Complete Course Listing

**116-108 Health and Safety****Credits:** 3

Learners will analyze the safety and health issues affecting today's business organizations in a variety of industries. OSHA and EPA regulations and reporting will be explored and applied to hypothetical situations. Learners will examine security issues in the workplace and present mitigation methods. Learners conduct research on a specific safety topic and make a presentation based on their research. Upon completion, learners will be prepared to test for OSHA 10 hour certification.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 116-102

Complete Course Listing

**116-115 Compensation and Benefits****Credits:** 3

This course focuses on the compensation and benefit elements that make up a total rewards system and how an organization utilizes these elements to be competitive in their market. Learners will create a compensation structure and propose benefit programs. Focus will be on the major categories of benefits, including planning and administration, regulation compliance, insurance, retirement plans, paid time off, etc. This course is a pre-requisite for Payroll Administration 116-137 and Human Resource Practicum 116-138.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**116-116 Staffing Organizations****Credits:** 3

Learners will explore best practices in recruitment, retention, interviewing, selection, and hiring as it applies to an organization's staffing needs. Learners practice the skills necessary for interviewing individuals in a variety of settings. Behavior-based questioning is emphasized. This material supplements the legal aspects of the employment process. This course is a pre-requisite for Human Resource Practicum 116-138.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 116-193

Complete Course Listing

**116-119 Labor Relations****Credits:** 3

Learners are introduced to the history of the American Labor force and explore specific laws concerning the regulation of employment. Through discussions and case analyses, students interpret the legal requirements and restrictions for labor and management. Topics explored include the legalities of union certification and de-certification, negotiation and administration of labor agreements, strikes, lockouts, mediation, and arbitration. Learners will author contract proposals, negotiate changes to an existing labor agreement, and learn to administer specific labor contract language.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**116-137 Payroll Administration****Credits:** 3

Learners will apply payroll concepts within the context of a business. Learners will also interpret financial statements and prepare hypothetical budgets. The topics covered include the following: maintaining payroll records; taxable benefits; statutory and other deductions; preparation of payroll journal entries; government reporting; computerized payroll systems. The learner will be prepared to take the Fundamental Payroll Certification test upon completion through the American Payroll Association.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (116-115 or 196-115)

Complete Course Listing

**116-138 Human Resource Practicum****Credits:** 3

Learners further develop their HR knowledge and skills by working with HR professionals to complete human resource projects for area organizations. The students are provided actual HR related projects from local organizations. Project management tools are applied to the project for effective results. This course is the HR program capstone and requires the following pre-requisite courses: 116-193, 116-116, 116-102, 116-115.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (116-102 or 196-102) and (116-115 or 196-115) and (116-116 or 196-116) and (116-193 or 196-193)**Co-requisites:** (116-152)

Complete Course Listing

**116-152 Talent Management****Credits:** 3

This course focuses on facilitating improvement or correction of employee performance. Through a simulation, learners will create an on-boarding program, an employee handbook, and performance evaluation methods. Techniques will be practiced concerning effective communication, an investigation, coaching skills, career counseling, termination, facilitating change in work procedures, and managing the conflict that often results from change. Staffing Organizations 116-116 is a pre-requisite.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (116-116)

Complete Course Listing

**116-168 Organizational Development****Credits:** 3

This course introduces the learner to the different motivational mechanics that affect individuals, teams, and organizations. Focus is placed on understanding individual differences and how they are manifested within an organization. Learners will compare leadership theories, power and organizational structures, organizational cultures, and decision-making processes. Communication during workplace changes and career management is practiced and explored.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**116-193 Human Resource Management****Credits:** 3

This course establishes the foundation for effectively managing people in an organization. All of the Human Resource functions are examined such as: Recruitment, Interviewing and Selection, Orientation, Training, Performance Review, Compensation and Benefits within the context of a typical business. Learners explore labor forecasting and strategy and analyze impacts on the organization. This course is a pre-requisite for Human Resource Practicum 116-138.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Human Services (520)

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**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****520-100 Introduction to Human Services****Credits:** 3

This course examines the scope, values, and principles of the Human Service profession. Students are introduced to the typical roles and duties of various human service workers and will analyze the role they play within organizations, as well as with the people and communities they serve.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-101 Community Resources and Services****Credits:** 3

This course will introduce the learner to a wide variety of community agencies, resources, and programs. The functions, funding, clients served, eligibility requirements, and referral procedures of the agency will be explored. Learners will have a chance to participate in site visits and learn about various agencies through guest speakers.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-102 Introduction to Gerontology****Credits:** 3

The learner will identify basic theories and facts about the aging process and will analyze the psychological and sociological experience of the older adult population. Learners will be able to apply this knowledge towards methods and techniques for serving the aged.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-103 Interviewing Principles & Documentation****Credits:** 3

The learner develops techniques for interviewing and applies record-keeping skills as practiced in human services agencies. Skills to be practiced include social history and summary recording, case assessment and management, as well as intervention plan development.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-104 Racial and Cultural Diversity in Human Services****Credits:** 3

This course examines the importance of understanding diversity in mental health careers and the helping professions. The learner analyzes culturally-based, help-seeking behaviors among racial, ethnic, and other sub-populations. General diversity issues are also presented in order to aid students in developing cultural competence in the helping professions.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-105 Intro to Addiction and Substance Abuse Disorders****Credits:** 3

The learner examines the history of drug use along with the changing historical trends of abuse. The learner will explore various types of addictions and how they are similar and dissimilar to chemical addictions. Learners will analyze the biology of psychoactive drugs and how they can cause addiction.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-106 Professional Practices in Human Services****Credits:** 3

This course prepares learners to enter the human services profession and abide by a working knowledge of professional codes of ethics. Learners will explore social/ethical issues that impact the profession. Professional credentialing, continuing education, and maintaining vitality within the field will be analyzed.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-107 Field Experience / Human Services 1****Credits:** 3

Learners develop skills as human services workers by working directly or indirectly with clients through placement in a local social services agency under professional supervision. Students will gain experience through on-the-job training by integrating human services theories and professional skills. Students will explore job responsibilities that relate to a human services agency including client/staff interaction and employee accountability.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (520-100) and (520-106)

Complete Course Listing

**520-108 Children and Family Services****Credits:** 3

This course introduces the learner to the human service professional's role when working with children, families and groups. Issues impacting the family system will be analyzed, including child abuse, divorce, mental health, juvenile delinquency, bereavement and physical health problems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-109 Group Facilitation****Credits:** 3

The learner develops skills and techniques needed to lead informational and supportive groups. Various counseling approaches and their application to group work will be identified along with the developmental stages of groups.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (520-100) and (520-103)

Complete Course Listing

**520-110 People with Disabilities****Credits:** 3

This course prepares students to work with individuals and families impacted by disabilities. The learner explores a variety of disabilities and issues common to persons with disabilities. Students apply methods and techniques to work with this sub-population.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-111 Field Experience / Human Services 2****Credits:** 3

The learner is given the opportunity to demonstrate understanding of more advanced social work skills and techniques used in the field. Learners examine the operations of a human services agency including client/staff interaction and employee responsibilities. Learners will be able to apply the experience gained in this course with what they have learned in the program to enter the profession as an entry-level human services worker.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (520-107)

Complete Course Listing



**520-112 Human Services Organizational Operations****Credits:** 3

This course focuses on characteristics and functions of human services organizations and the roles of human service workers in those organizations. Learners apply their skill in organizational assessment methods, planning, budgeting, grant writing, evaluation and consulting – all part of the Human Service Profession.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (520-100) and (520-107)

Complete Course Listing

**520-113 Rehabilitation Services****Credits:** 3

This course gives the learner a fundamental knowledge base in the drug and alcohol addiction field. Learners examine information about pharmacology, self-help groups, levels of care, symptom identification and assessments. Through the use of case studies the student applies knowledge and skills towards serving those in need of rehabilitation services.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-114 Victimology****Credits:** 3

This course will provide the student with an analysis of how human services and criminal justice professionals, regardless of their role, come in contact with victims of crime. It will examine criminal victimization in the United States via an overview of current theory, research, and trends of victimization. It will analyze specific crimes types, the impact of crime on victims and society, the role of victims within the criminal justice system, specific remedies, and victim rights and services. It will explore victimization with a context of current events and local models of crime victim services.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-115 Understanding Addiction****Credits:** 2

This course provides an overview of addiction, including classification and basic pharmacology of drugs, basic physiology and effects of drug use on the human body and patient, client learning styles and group teaching methods, delivery of educational programs, health and behavior problems related to substance use and basic life skills such as stress management, communication and assertiveness.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-118 AODA Case Management****Credits:** 3

This course includes studies in implementing treatment plans including continuing assessment, the referral process, service coordination, including for co-occurring medical and psychological disorders, record management and documentation and utilizing the written client record to guide and monitor services to reach measurable goals and objectives.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-119 AODA Counseling****Credits:** 3

Includes studies of understanding addiction, recognized treatment theory and practice, the recovery process, effective strategies for meeting the counseling needs of diverse clients, crisis management skills, and treatment of co-occurring medical and psychological disorders.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-120 Psychopharmacology****Credits:** 3

Provides a historical and cultural perspective on alcohol and drug use and abuse, and abuse preventions. It incorporates an overview of drugs including their actions, effects, abuse, and psychopharmacology.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-139 AODA Internship 2****Credits:** 4

Provides the learner with the opportunity to assume greater responsibility and more of the duties of a substance abuse counselor in actual clinical practice. The course provides the learner with opportunities to strengthen skills and to experience the full range of responsibilities assumed by an AODA counselor while being supervised by an experienced substance abuse professional.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**520-160 AODA Internship 1****Credits:** 3

An on-site experience during which the learner is oriented to the environment of substance abuse treatment. Supervised practice in the 12 core functions of counseling including assessment, group and individual counseling, case management, and consultation is offered.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Industrial Engineering Tech (623)

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**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****623-121 Engineering Drawing and Measurement****Credits:** 3

This self-paced course provides the foundation skills needed to interpret industrial blueprints and perform basic metrological measurements. Orthographic projection, pictorial drawings, sections, auxiliary views, dimensions and tolerances, title blocks, revisions, basic GD&T symbols, and similar topics are covered. Students will also examine measurement concepts as they apply to the manufacturing environment, and perform hands-on activities using precision measuring tools.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing



**623-122 Ergonomics and Workplace Safety****Credits: 2**

The health and safety of employees within Industrial and Manufacturing facilities has been a major concern for industry across the country. How the physical tasks within a job duty are performed can impact the health of an employee. The setup of a manufacturing line, the process of material handling or the procedures to follow when working within a facility must be considered for safety and health. In Ergonomics and Workplace Safety you will identify factors that can lead to musculoskeletal disorders (MSDs), analyze and suggest improvements to job hazards on an employee's workstation, look at costs and benefits of ergonomic improvements and investigate accident reports for causes and problems related to work safety.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**623-155 Statistical Process Control (SPC)****Credits: 3**

This course offers an in-depth exploration of the principles and applications of statistical process control. Specific subject areas covered include background, basic principles, variation, histograms, probability, variable and attribute control charts, and machine and process capability. Lectures will be supplemented with in-class exercises designed to make the concepts and their application more easily understandable. These individual and group activities will be drawn from the student workbooks and from additional materials to be distributed by the instructor.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**623-160 Manufacturing Materials and Processes****Credits: 3**

A study is made of the various materials used in industry today and how those materials can be altered or worked to create a specific product. Various areas such as forming, casting, forging and machining are discussed.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**623-165 Facilities Planning****Credits: 3**

This course covers the essential elements of plant layout and materials handling. Flow patterns, material handling requirements, equipment, and storage and retrieval methods are explored. The many factors affecting an efficient facility layout are examined, as are the decision-making tools for dealing with them. The course concludes with a group project, in which learners design an actual facility to satisfy given criteria. Each group will then present its design to the rest of the class for analysis and discussion.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**623-166 Industry and Quality Control****Credits: 3**

This self-paced course is an overview of quality issues in the modern industrial environment. Topics include basic quality concepts, sampling and inspection, fundamentals of measurement, statistical tools, quality policies and costs, improvement projects, and comparisons of popular quality philosophies.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**623-170 Industrial Organization and Structure****Credits: 3**

This course examines the structure of the modern manufacturing organization, and provides an overview of the interrelationship between the various functional departments and their activities. Historical background, management philosophy, planning and control requirements, labor, and human aspects of the organization are discussed.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**623-192 Process Planning****Credits: 3**

A study is made of the principles, practices, and techniques of process planning. Using the part drawing, the student learns through systematic analysis to select the most practical and economical processes and to determine the properly sequenced series of operations to transform materials into useful products. The students also select the type of tooling and equipment needed in terms of materials, quantity, tolerances, and surface quality requirements.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 623-121

Complete Course Listing

**623-196 Standards and+C1126 Regulations****Credits: 1**

This self-paced course provides an overview of state and federal standards and regulations governing workplace safety and the environment. Students will learn to recognize hazards and identify applicable regulations. Emphasis is on locating standards in the code of federal regulations (CFR), applying safety and environmental standards in the workplace, and interpreting material safety data sheets (MSDS).

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

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**Industrial Equipment Mechanic (462)**

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Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**462-301 Electrical Fundamentals****Credits:** 3

This course is designed to introduce students to the basic concepts of DC electricity, single phase AC electricity, and three phase AC electricity. Students demonstrate proper safety procedures while examining basic electrical components such as resistors, capacitors, inductors, switches, indicators, relays, and basic test equipment. Students will be able to analyze and construct circuits, measure voltage, current, resistance, capacitance, and inductance as they apply to circuits.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-302 Electrical Control System****Credits:** 3

In this course, students apply the basic principles related to electro-mechanical systems, as well as motors, transformers, frequency drives, and various electro-mechanical devices in order to enhance control systems. Students will be able to construct and troubleshoot starter and control circuits, utilizing both line and low voltage circuits. This course covers the fundamentals of National Electrical Code wiring, soldering, relay ladder logic, and lock-out-tag-out procedures.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-303 Programmable Logic Controllers****Credits:** 4

This course is designed to introduce students to the basics of Programmable Logic Controllers (PLC's) used in industry. PLC's in both the online and offline modes, as well as ladder logic, logic gates, Boolean equations and truth tables will be explained and utilized in course demonstrations. While practicing proper safety procedures, students will examine discrete and analog input and outputs, hardware sensor interfacing and troubleshooting techniques, so they can program PLC's using timer, counter, latch, data movement, sequencing, and other instructions.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-304 Electro-Mechanical Prints****Credits:** 2

This course illustrates for students the basic symbols related to electro-mechanical prints. Students will analyze and interpret electro-mechanical prints and line diagrams to understand the sequence of operations and troubleshoot systems.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-306 Machining Prints****Credits:** 2

This course is designed to illustrate the basics of machining prints. Students will be able to breakdown machining prints and model isometric sketches as well as interpret orthographic projection drawings which include sections, auxiliary views, threads, fasteners, surface finishes, geometric dimensions, tolerances, and assembly points.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-307 Maintenance Milling****Credits:** 3

This course is designed to outline for students the basics of milling fabrication processes that are common to the industrial maintenance field. Through demonstration and practice, emphasis will be placed on knowing the machine parts, their function, and performing simple milling operations for the student. Students will be able to demonstrate the basic use of mills, related safety, maintenance, metal cutting theory, cutting tools, and work holding for the mill.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-308 Industrial Maintenance Metallurgy & Metrology****Credits:** 2

This course emphasizes the basics of metallurgy and metrology. The properties of iron and metals, testing and heat treating of metals, steel designations, and cast iron as well as non-ferrous metals are examined. Through the integration of mathematic skills, students will demonstrate the use of semi-precision measuring tools such as steel rules and screw thread gauges, as well as precision measuring instruments such as micrometers, go/no go plug gauges, go/no go thread gauges and assorted calipers.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-309 Lathe Fabrication Processes****Credits:** 3

This course emphasizes the basics of lathe fabrication processes that are common to the industrial maintenance field. Students will practice the basics of metal turning techniques. Students will engage in the basic use of lathes, associated processes, while adhering to related safety standards as well as demonstrating the ability to work with lathe tools, and addressing maintenance issues.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-311 Fluid Systems****Credits:** 4

Students in this course will investigate the theory of fluid power. Common fluid principles will be analyzed and the basic system of the hydraulic unit will be the focus. Students will explore the theory of fluid pumping applications common in industry. While incorporating troubleshooting techniques, maintenance, filtration and safety procedures, students will be able to perform the construction of fluid systems including the basic plumbing, layout, cutting, threading, and installation of systems.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-312 Pneumatic Systems****Credits:** 3

This course is designed to inform students of the basics of pneumatics, while analyzing the advantages, disadvantages and inherent problems of this system. While incorporating safety principles, students will analyze the various parts of a pneumatic circuit for their use, which includes: examining the main parts of a pneumatic system, evaluating the characteristics of physical laws that apply to pneumatics, summarizing the laws governing pneumatics, identifying air conditioning and distribution equipment, adjusting pressure regulators to specified pressure, evaluating the characteristics and terms of pressure drop versus flow relationship, as well as the characteristics and terms of vacuum generation. Pneumatic safety principles will be introduced.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-313 Facility Prints****Credits:** 3

This course focuses on basic facility print reading fundamentals, and students will engage in understanding, interpreting, and utilizing architectural drawings and symbols. Students will visualize facility structures and interpret elevations, plan views, details, and sections from drawings as well as interpreting building specifications. This course will emphasize students' ability to analyze and interpret facility prints.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-314 Maintenance Management****Credits:** 2

Students in this course will engage in basic maintenance management and customer service skills. The basic principles of maintenance management and quality control are explored and practiced by students. Students will perform the duties of maintenance record keeping, ordering parts, shop operation, and customer service principles for both internal and external customers.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-316 Conveyor Systems****Credits:** 3

In this course, students examine multiple facets of different conveyor systems, including the screw, flat belt, and roller conveyor. While incorporating conveyor safety procedures, students will investigate the different systems used to make up an effective belt conveyor and be able to apply standard applications, preventive maintenance, and repair principles.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-317 Basic Welding for Industrial Maintenance****Credits:** 3

This course is designed to acquire the skills needed to perform routine welding repairs in the maintenance profession. Safety procedures, layout and measuring, oxy-acetylene welding, oxy-acetylene brazing and cutting, shielded metal arc welding (SMAW), and gas metal arc welding (GMAW) will be explored and practiced.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-318 Mechanical Power Transmission Systems****Credits:** 3

This course is designed to engage students in the applications of gears, belts bearings, chain drives, and lubrication processes used in industry. Students will interpret the basic industry standard principles of operation, installation, preventive maintenance, and repair procedures of these components. Industry safety procedures will be examined and practiced throughout the course.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-319 Valves, Gaskets, Seals****Credits:** 1

Students will examine and practice standard procedures related to installing, maintaining, and replacing valves, gaskets, and seals in industry applications. Students will be able to perform these procedures while adhering to industry safety standards.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-321 Machine Setup and Installation****Credits:** 3

This course is designed to examine standard applications of rigging, machine leveling, alignment of shafts, couplings, bearings, and machines which are common to industry. Students will be able to perform several leveling and alignment procedures and the common components used to lift and move machinery and equipment while practicing standard safety procedures.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**462-322 Human Relations in the Industrial Setting****Credits:** 2

This course is designed to give students insight into how an individual's behaviors and abilities affect their relationships with others at work and with customers. Areas stressed include presenting a professional image in seeking employment, developing a positive work attitude, reliability on the job and an awareness of personal adjustments needed to succeed in the workplace. During this course, students will engage in an internship opportunity on or off campus.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

## IT Application Development&Web (152)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****152-119 Introduction to Programming with JavaScript****Credits:** 3

Teaches the basic concepts of programming using the JavaScript language. Topics include: embedding JavaScript in HTML, event-driven programming techniques, program control logic, pseudocode, and an introduction to object-oriented programming.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-111)

Complete Course Listing

**152-133 Advanced Systems Documentation****Credits:** 2

This lecture/lab course will focus on technical writing and documentation skills. Hands-on work will include writing and editing business letters and memos, persuasive documents, technical reports and html documentation. The course will culminate in a short research paper and oral presentation.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-120) and (801-195 or 801-136 or Test Waived-College Degree)

Complete Course Listing

**152-139 Current Issues and Trends in Information Technology****Credits:** 3

Current Issues & Trends is a course designed to cover a "hot" computer area. Possible topics include: advanced applications; object orientated programming; computer security, computer ethics; and Internet programming.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-142 Introduction to .NET Programming****Credits:** 3

This lecture/lab course uses the Visual Basic .NET (VB.NET) and/or C# programming language to teach problem-solving principles and demonstrates how to apply said principles in the development of algorithms designed to solve typical business problems. Structured programming (sequence, selection, and iteration) utilizing pseudocode is covered in detail. Introductions to database concepts, database design, and object-oriented programming (OOP) are also given. 152-119 Learning to Program with Java Script is a recommended pre requisite.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-119) and (152-157) and (152-163)

Complete Course Listing

**152-143 Introduction to Java Programming****Credits:** 3

Introduction to Java Programming introduces programming and object-oriented design concepts using the Java programming language. Students examine Java programming basics and use a text editor in a development environment. Design concepts and programming tools will be integrated with an emphasis on practical business solutions.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 152-119

Complete Course Listing

**152-145 Advanced Java Programming****Credits:** 3

This course is a continuation of Introduction to Java Programming. Students will further analyze inheritance, exception handling, files, database access, advanced GUI applications and array lists.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 152-143

Complete Course Listing

**152-147 Relational Database Development****Credits:** 3

Relational Database Development is a lecture/lab class split into two parts: 1) A general overview of database theory, including: relational database management systems (RDBMSs) and normalization. 2) The fundamentals of the structured query language (SQL) data definition language (DDL) and data manipulation language (DML) commands, utilizing client/server based database software. For IT-Web Analyst/ Programmer students, 152-163 (Relational Database Design) is a recommended pre req for this course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-163) and (804-133)

Complete Course Listing

**152-148 Relational Database Coding****Credits:** 3

Students will engage in hands-on training, utilizing a relational database management system (e.g., MySQL) in a client/server web based environment which uses PHP on the server side. Students will analyze advanced structured query language (SQL) commands and concepts, and web site development utilizing the PHP programming language.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-157) and (152-182)

Complete Course Listing

**152-149 Secure Coding****Credits:** 3

Secure coding involves concepts such as: 1) The validation of computer program input. 2) The heeding of computer compiler warnings. 3) The internal and external sanitization of any and all computer program data. 4) The adherence to the principle of least privilege. 5) The adoption of a secure coding standard. The Secure Coding course will teach students how to adhere to practices such as these and others to build secure code from the onset of an information technology project.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-148) and (152-158) and (152-161)

Complete Course Listing

**152-150 Systems Analysis and Design****Credits:** 3

Systems Analysis & Design is a lecture/lab course for second year students, intended to introduce the concepts involved in a small-to-medium sized information systems project from inception to implementation. Traditional analysis and design methodologies as well as object-oriented methodologies will be covered. Throughout the life cycle of the analysis and design process, Microsoft Project will be used. Students will use Microsoft Visio as a tool to diagram various components of the system during the analysis phase. Additional concepts covered will be verbal and written communication with users and team members, professional behavior, professional attire, problem identification, and problem solving. Systems Analysis and Design will draw on knowledge obtained from previous classes, and require the student to synthesize and apply that knowledge.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-127)

Complete Course Listing

**152-153 Mobile Web App Development - iPhone****Credits:** 3

Students in this course will analyze the basics of creating Mobile Web applications for an iPad/iPhone. The basics of the Objective-C language are presented, and students will engage in building an actual working iPhone/iPad application.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-148) and (152-158) and (152-161) and (152-145)

Complete Course Listing

**152-156 Mobile Web App Development - Android****Credits:** 3

This course examines the basics of creating Mobile Web applications for an Android phone. The associated android basic programming constructs defined, using the Java programming language. Students will build an actual working Android application.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-148) and (152-158) and (152-145)

Complete Course Listing

**152-157 Website Development-XHTML/CSS****Credits:** 3

Website Development - XHTML/CSS is a beginning class in client-side Web development. Topics covered include: The fundamentals of the Hypertext Markup Language (HTML) and XHTML, Cascading Style Sheets (CSS), an introduction to JavaScript.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-111)

Complete Course Listing

**152-158 Advanced Website Development****Credits:** 3

In this course, students will engage in the development of client-side web sites using frameworks such as Bootstrap to simplify development, allow development of responsive web sites, and greatly increase the appeal and functionality of the site. Students will analyze other concepts which include Content Management systems, such as Git and Github.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-182)

Complete Course Listing

**152-161 Web Application Development Using ASP.NET****Credits:** 3

Students develop Microsoft ASP.NET applications that deliver dynamic content to the Web. An emphasis is placed on server-side programming and the role ASP.NET plays. As part of this course, students create Web forms with server controls, display dynamic data from a database using Microsoft ADO.NET, read XML configuration files and learn to debug ASP.NET web pages.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-147) and (152-167)

Complete Course Listing

**152-163 Relational Database Design****Credits:** 3

Relational database design is a beginning course in database concepts and design, utilizing Microsoft Access. Students will design, normalize and develop a database and program the associated interface in a realistic environment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (631-111)

Complete Course Listing

**152-164 Design and Implementation Projects****Credits:** 3

This capstone course is designed to have the student utilize all concepts learned in this program in a real world application setting. Students work with a team to develop an integrated Information Solution for a large scale project. Students will be involved in defining their own skills in both technical and cooperative team interaction areas.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-161) and (152-148) and (152-145)

Complete Course Listing

**152-167 AJAX and JavaScript Website Development****Credits:** 3

Students in this course are introduced to the basics of DHTML, JavaScript, and the XmlHttpRequest call. Students create web sites using JavaScript and AJAX to enable them to be responsive and feature-rich.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (152-157) and (152-163)

Complete Course Listing

**152-181 Supervisory Occupational Experience-Web Analyst****Credits:** 2

Micro Programmer Internship prepares student for the transition from the classroom to the work place. Students will be employed in actual jobs in their field. They will use this opportunity to apply learned concepts and skills in practical situations and acquire the knowledge and experience of current techniques, methods, and theories in a data processing environment. The intern's progress will be monitored and evaluated by the sponsoring employer and a BTC Internship Advisor. The desired outcome of the course is to qualify the student for eventual employment in an entry-level IT position.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 152-150

Complete Course Listing

**152-182 Web Analyst Field Study****Credits:** 1

The Web Analyst Field Study is a course designed to equip the student with the skills necessary to plan and execute an active job search. Topics covered include: resumes; personal data files; letters of application; and interviewing techniques. Students will prepare a strategy for finding and obtaining a position that best fits their goals and interests. Students will also cover the organization of a typical data processing department.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (152-147) and (152-142) and (152-137)

Complete Course Listing



**152-191 Secure e-Commerce Concepts****Credits:** 3

This course is a review of Internet/Worldwide Web/e-Commerce concepts, including Internet development, internetworking principles, Internet services, Web programming, site administration, and business and security concepts, including both human and technological factors.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-192 Designing Secure Websites****Credits:** 3

This course is designed to educate students about the security issues of the Worldwide Web, Web servers and Web applications. The learner will be introduced to client and server-side security principles and programming. At course completion, the student will be able to define, design and implement a secure Web site. Successful completion of 152-191 "Secure e-Commerce Concepts" is highly recommended prior to this course.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-193 Client/Server Systems Security****Credits:** 3

This course provides an overview of the most critical topic in the Information Assurance arena: secure data exchange between internetworked systems. Topics include client/server security system design concepts; developing a database security and audit plan; system design and development; user-, group-, and application-level permissions; data integrity enhancement and maintenance; and the role of the database administrator. A methodology for anticipating, detecting, reacting to, and response to network attacks will be a significant part of the course material.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-151 and (152-143**Co-requisites:** 150-151) or 152-143)

Complete Course Listing

**152-195****Credits:** 1

Students will analyze the foundation of web pages - markup languages. Students analyze the basics of how web browsers read markup language to display web pages. Students will organize text and add images or videos to create useful and engaging web pages.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-196****Credits:** 1

This course is a continuation of 152-195 Markup Basics and will focus on how to create interactive web pages, showcase tabular data effectively, and use markup code to make content more accessible.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-195

Complete Course Listing

**152-197****Credits:** 1

This course will analyze the elements of good design while also learning the basics of design and style coding. Students will use scripting to add color and background images and stylize fonts.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-196

Complete Course Listing

**152-198****Credits:** 1

This course will further analyze design elements of web pages and evaluate more advanced level layout creation and customization with scripting.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-197

Complete Course Listing

**152-199****Credits:** 1

Student apply the basics of high-level scripting in this course that covers syntax, variables, conditionals and functions, along with a focus on scripting for the web with Javascript.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-202****Credits:** 1

This course provides an overview and analysis of the JavaScript application architecture and student analyze solutions like jquery, Node, Javascript with HTML5, authentication, authorization, and modern JS Libraries.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-199

Complete Course Listing

**152-205****Credits:** 1

This course provides students with an advanced understanding of the core mechanics of how JavaScript compiles, optimizes, and executes in the browser, enabling students to better analyze Javascript security concerns like XSS (cross site scripting) and CSRF (cross site request forgery).

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-202

Complete Course Listing

**152-206****Credits:** 1

This course gives students a beginning knowledge base in database concepts and design. Students will design and then develop a database in a virtual environment.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-196

Complete Course Listing



**152-207****Credits:** 1

This course evaluates the fundamentals of the structured query language (SQL) data definition language (DDL) and data manipulation language (DML) commands, utilizing open source database software.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-206

Complete Course Listing

**152-208****Credits:** 1

In this continued exploration of server-side site development, the student will connect to a database on a virtual server and allow a client application to read, write and update the database. Students will also develop skills in analyzing and evaluating how web server cookies function.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-207

Complete Course Listing

**152-209****Credits:** 1

In this course, students will prepare an environment for, and then install and configure, an open source web server.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-208

Complete Course Listing

**152-210****Credits:** 1

In this course, students will configure their server and install services to use for projects during the remainder of the semester. Students will also use DNS to connect a URL to the virtual server space they've created.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-209

Complete Course Listing

**152-211****Credits:** 1

In this course, students will evaluate various tools used in web development to plan, organize, and execute digital projects. Storyboarding, wireframes, and usability testing will be demonstrated.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-212****Credits:** 1

In this course, students will continue their knowledge and use of tools for managing and streamlining digital projects, analyzing which tools are best suited for various situations.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-211

Complete Course Listing

**152-213****Credits:** 1

This course has the students explore the basics of software version control (SVC), including process management. Students will evaluate a brief history of SVC and analyze the fundamental concepts of check-in/checkout, forking, merging, commits, and distribution.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-212

Complete Course Listing

**152-214****Credits:** 1

In this course, students will evaluate and apply software version control systems to complete various sophisticated tasks.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-215****Credits:** 1

This course will review the many available options for content management systems, both proprietary and open source. Students will evaluate the options for systems and identify the best solution for different scenarios.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-216****Credits:** 1

In this course, students will install and configure an open source content management system, along with user training and roll out.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-215

Complete Course Listing

**152-218****Credits:** 1

In this course, student will identify what search engine optimization (SEO) is and why its an important skill for front end developers to possess. Students will analyze free and paid keyword search tools, identify keywords rank, and generate a keyword plan.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-222****Credits:** 1

Student will develop the skills and knowledge they need to code with front end framework.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-223****Credits:** 1

Students in this course identify and apply learning of how mobile technology works, including tools for development, specifications, and implementation.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-224****Credits:** 1

In this course, students will identify a problem that can be solved by technology and research the options for solving the problem using a specified programming language or web tool.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-225****Credits:** 1

Students in this course identify and apply the foundations of programming on the LAMP stack (Linux, Apache, MySQL, and PHP), from a general overview of a server-side programming language..

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-226****Credits:** 1

In this course, students will create dynamic, data driven websites using the LAMP stack (Linux, Apache, MySQL, and PHP).

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-225

Complete Course Listing

**152-227****Credits:** 1

Students analyze server side programming, including functions, debugging and logging, functions, extensions, and application repositories.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-226

Complete Course Listing

**152-228****Credits:** 1

Students examine the uses of social media and the tools that are available to manage it. Students integrate social media and respective tools with web sites.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-229****Credits:** 1

Students explore and analyze options in social media for advertising, including creating ads and identifying audiences.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-228

Complete Course Listing

**152-230****Credits:** 1

In this course, students explore open Application Programming Interfaces (APIs) within social media software and build a functioning program that connects to a social media platform.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-229

Complete Course Listing

**152-231****Credits:** 1

Students analyze the mobile first responsive design method, outlining the basics of creating web sites that are functional cross platform.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-232****Credits:** 1

Students create responsive components within web pages including mobile web forms and breakpoints.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-231

Complete Course Listing

**152-233****Credits:** 1

Students examine the meaning of accessibility and how it applies to the web sites. Students will learn strategies for how to make web sites accessible and usable for a wide variety of audiences.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-232

Complete Course Listing

**152-234****Credits:** 1

Students review the body of work they've completed during their time in the program and use this review to develop a full portfolio website. From this website portfolio review, students will also engage in resume writing and employment readiness skills.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**152-235****Credits:** 3

In this capstone course, students will use the skills learned in the program to identify a digital solution to a complex problem. They will then outline the problem, find a solution, present their findings for peer review and collaboration.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 152-224

Complete Course Listing

## IT-Microcomputer Specialist (154)

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**Information provided includes course descriptions by subject only.**

**For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**154-113 Desktop and Server Hardware****Credits:** 3

This is a lecture/hands-on course designed to teach students desktop and server hardware fundamentals. Topics include: hardware identification and specifications, basic desktop/server setup, installation of desktop/server operating systems, manual installation of driver software, and desktop/server hardware installation and troubleshooting.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**154-121 Information Technology Helpdesk and Customer Service****Credits:** 3

This course will explore the fundamentals of customer service required in order to successfully satisfy customer technology needs. Topics included in this course will be techniques for positive communication, effective listening skills, dealing with difficult customers as well as developing proficiency in time and stress management. Troubleshooting hardware, software, and basic networking problems will also be a focus of this course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (154-120) and (150-130) and (154-113)

Complete Course Listing

## IT-Networking & Info Security (150)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****150-113 Computer Forensics****Credits:** 3

This is a lecture/hands-on course designed to teach students desktop and server hardware fundamentals. Topics include: hardware identification and specifications, basic desktop/server setup, installation of desktop/server operating systems, manual installation of driver software, and desktop/server hardware installation and troubleshooting.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-117 Local Area Network Switching and Wireless****Credits:** 3

LAN Switching and Wireless is a lecture/lab course in which students build multi-platform and multi-protocol networks. Topics include: IPv6, installation and configuration of VLANs, multi-layer switches, routers, interior gateway routing protocols, and enterprise wireless solutions.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 150-131

Complete Course Listing

**150-118 Server and Data Center Virtualization****Credits:** 3

Server and Data Center Virtualization is a lecture/lab course that will introduce advanced topics in server virtualization and SANs. Students will configure vNetwork standard switches, install and configure VMWare ESXi, manage shared storage, deploy virtual servers in an enterprise environment. They will also engage in the back up, recovery, and migration of virtual machines.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-127)**Co-requisites:** (150-128)

Complete Course Listing

**150-120 Configuring Desktop Operating Systems****Credits:** 3

Configuring Desktop Operating Systems is a lecture/hands-on course designed to teach the configuration of desktop operating systems. Topics include operating system installation and troubleshooting, configuration, sharing and file system permissions, and users, groups, profiles, and policies. An introduction to the use of VMware Workstation is also provided to enable students further practice with operating system configurations learned in class.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-127 Introduction to Enterprise Virtualization****Credits:** 3

This lecture/hands-on course concentrates on using Enterprise Virtualization and administering Network Operating Systems such as Windows Server. Topics include: enterprise virtualization, server administration, network administrator responsibilities, login security, file system security and design, Active Directory, user administration and client installation, configuration, troubleshooting, and print management.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 150-120

Complete Course Listing

**150-128 Windows Enterprise Server Administration****Credits:** 3

Windows Enterprise Server Administration is a lecture/lab course designed to introduce advanced Windows Server administration. The student will learn GPOs, Active Directory Design, DFS, Terminal Services, CA configuration, IIS, VPNs, DHCP, DNS, software deployment, PowerShell, and utilities like NTDSutil.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-127)**Co-requisites:** (150-118)

Complete Course Listing

**150-130 Introduction to Enterprise Networks****Credits:** 3

Intro to Enterprise Networks is a lecture/hands-on lab course designed to introduce students to configuring protocols and devices needed for network communication. Topics covered include: OSI Reference Model; LAN/WAN topologies; cabling systems; access methods; protocols; ip addressing; introduction to various network clients; use of network devices (switches, routers); fundamentals of network design; and basic troubleshooting tools.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-131 Routers and Routing Protocols****Credits:** 3

Routers and Routing Protocols is a lecture/lab course that is designed to introduce the student to routing and switching infrastructures, basic Cisco router and switch configurations, troubleshooting methodologies, OSI 7 layer concepts, integration of basic network components, and integration of desktop and server-based operating systems with infrastructure in an enterprise network.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-130) and (150-146)

Complete Course Listing

**150-132 IT-Project Management****Credits:** 3

This is a capstone project course, for second year students, that culminates the experience of the two-year program. The focus will be an integration of all of the networking skills acquired throughout the program with hands-on applications including problem-solving, troubleshooting, and technical documentation. Network troubleshooting, server design, network analysis, network design, security, recovery models, project management, network planning, and business models relating to computer networking and IT will be stressed.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-133 Network Security****Credits:** 3

This course introduces learners to the fundamentals of network security. The course covers various topical areas involved in network security, including security topology, intrusion detection, device configurations, access lists, authentication, and encryption. Different methods of attacks, such as viruses, Trojan horses, and worms are also reviewed. This course also introduces wireless security concepts.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-130) and (150-151)

Complete Course Listing

**150-134 Internetwork Security****Credits:** 3

This course covers how to secure internetworked information systems (i.e., those connected by hubs, switches, routers, etc.), including defense against methods used by hackers to enter dedicated systems. Topics covered include confidentiality, integrity and reliability; user and group authentication; authorization and accounting; encryption replication; and security enhancement features.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-133) and (150-135)

Complete Course Listing

**150-135 Operating Systems Security****Credits:** 3

Students will cover the essentials of securing popular operating workstations and networks. Topics include authentication, group security, remote access security, security file resources, Internet Protocol security, and more. Active Directory and similar topics are also covered.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-136 Perimeter Security****Credits:** 3

This course covers internetworked systems security management and configuration, integrated system security software, configuring network access servers for enhanced security, and an understanding of systems security support and management. Students will learn how to use Active Director, or a similar service, to create and maintain secure perimeters within a network.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 150-134

Complete Course Listing

**150-139 Current Issues in Networking****Credits:** 3

Current Issues & Trends is a course designed to cover a "hot" computer area. Possible topics include: advanced applications; object orientated programming; computer security; computer ethics; and Internet programming.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-140 Data and Control Structures****Credits:** 3

Data and Control Structures is a lecture/hands-on course designed to teach students to think the way that the computer thinks and how data is stored and retrieved. Topics include: structured programming (i.e. sequence, selection, and iteration), database design, query building, form design, and report design.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 150-120

Complete Course Listing

**150-141 Linux****Credits:** 3

Linux is a lecture/hands on course designed to teach basic Linux commands and system administration. Linux desktop operating system installation, users, groups and file security will be examined. Linux server installation, configuration, troubleshooting and security topics will also be addressed.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 150-127

Complete Course Listing

**150-142 Advanced Local Area Network/Wide Area Network Topics****Credits:** 3

Advanced LAN/WAN Topics is a lecture/lab course. Topics include configuring and troubleshooting WAN protocols, BGP, QoS, HSRP, Secure Routing, RADIUS and TACACs Servers, VPNs, Firewalls, and Access-Lists.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-143 Exchange and SQL Server****Credits:** 3

Exchange and SQL Server is a lecture/hands-on course that is designed to introduce the student to Microsoft Exchange Server and Microsoft SQL Server Administration. Topics include: SQL Server installation, Exchange Server installation, Exchange and SQL configuration, managing the directory, managing distribution lists, managing information stores, writing advanced SQL queries, database design, normalization, and backing up and restoring Exchange and SQL Servers.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 150-128

Complete Course Listing

**150-144 Introduction to Enterprise Networks-1****Credits:** 1

Intro to Enterprise Networks-1 is designed to introduce students to basic network concepts. Topics covered include basic terminology, the OSI Reference Model, network protocols, and an introduction to network device configuration.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-145 Introduction to Enterprise Networks-2****Credits:** 1

Intro to Enterprise Networks-2 is designed to introduce students to media types, network access methods, LAN/WAN topologies, and the basic function of routers and routing protocols.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-144)

Complete Course Listing

**150-146 Introduction to Enterprise Networks-3****Credits:** 1

Intro to Enterprise Networks-3 is designed to cover the basics of IP addressing, the fundamentals of network design, and basic network troubleshooting techniques.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-145)

Complete Course Listing

**150-151 Information Security Principles****Credits:** 3

This course will explore Information Security Principles as they relate to managing a computer network and securing business resources. Common threats to data confidentiality, integrity and availability will be discussed along with appropriate countermeasures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-152 Information Systems Security Practicum****Credits:** 3

Students will typically work in the field, with an external enterprise, to learn how to develop a security vision statement, write simple but effective security guidelines, policies, and procedures that protect information, people, and property, and comply with legal and other requirements. Students will evaluate information and systems, assign ownership and responsibilities, and develop appropriate documentation.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-151) and (801-195 or 801-136)

Complete Course Listing

**150-153 Information Systems Security Management****Credits:** 3

Students will learn how to establish well-structured documentation systems for information security of both sanctioned and unsanctioned activities, including those reports required by law. They will learn to write technical guidelines and technical descriptions, and develop checklists. Students will also document the application of patches and configuration changes. A resume and portfolio, which is a culmination of all information security coursework, will be compiled.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-152) and (809-166)

Complete Course Listing

**150-154 Information Systems Security Measures****Credits:** 3

IS Security Measures is a lecture/lab course. The course covers topics such as system identification, authentication, auditing and monitoring for compromise, reducing attack surfaces, limiting privileged access, keeping systems updated, identifying critical assets and prioritizing their security monitoring. Other topics to be explored are implementation and configuration management, reviewing compliance regularly, evaluating settings with each new hardware or software version, and securing Active Directory domain controllers.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-117) and (150-128) and (150-133)

Complete Course Listing

**150-155 Current Issues and Trends in Information Assurance****Credits:** 3

Disaster Recovery Planning is the current issues seminar topic and others are being planned. This seminar-format course is designed to cover "hot" topics in Information Assurance technology. Course emphasizes various current or emerging conditions/problems and possible responses/solutions to them. Topics change based on emerging current issues and potential future topics may include: Advanced OS Security; Introduction to Cryptography; Emerging Technologies, etc.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 150-151

Complete Course Listing

**150-156 Network Forensics****Credits:** 3

This course will cover both advanced endpoint forensics (i.e. as a continuation of 150-113) and network forensics. Students will learn how to capture and analyze data from a network interface, as well as where and how to preserve it. The topic of eDiscovery, as a new discipline, will also be examined.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 150-113

Complete Course Listing

**150-157 IT Project Management 1****Credits:** 1

In this course students will explore fundamental concepts and principles of project management, such as project life cycles, knowledge areas, and the fundamental documents used in planning and executing projects.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 631-141

Complete Course Listing

**150-158 IT Project Management 2****Credits:** 1

In this course students will begin to apply project management principles in information technology settings. Students will practice identifying risks and managing costs and communications in projects.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-157)

Complete Course Listing

**150-159 IT Project Management 3****Credits:** 1

In this course students will explore more advanced topics in project management such as quality assurance, transitioning and closing projects, and procurement.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-158)

Complete Course Listing

**150-169 Introduction to Enterprise Virtualization 1****Credits:** 1

In this course students will practice the fundamentals of working with virtual machines, including the creation of new virtual machines, modifying virtual machines, and working with virtualization software tools.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-170 Introduction to Enterprise Virtualization 2****Credits:** 1

In this course students will practice more advanced processes related to virtualization, such as creating group and audit policies and remotely managing servers.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-169)

Complete Course Listing

**150-171 Introduction to Enterprise Virtualization 3****Credits:** 1

In this course students will build and test a virtual environment that incorporates components addressed in earlier Enterprise Virtualization courses.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-170)

Complete Course Listing

**150-181 Supervised Occupational Experience-Network Specialist****Credits:** 2

Supervised Occupational Experience - Networking is a course that prepares the student for the transition from the classroom to the work place. Students will be employed in actual jobs in their field. They will use this opportunity to apply learned concepts and skills in practical situations and acquire the knowledge and experience of current techniques, methods, and theories in a data processing environment. The intern's progress will be monitored and evaluated by the sponsoring employer and a BTC internship advisor. The desired outcome of the course is to qualify the student for eventual employment in an entry-level IT position.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 152-150

Complete Course Listing

**150-182 Information Technology Career Preparation****Credits:** 1

This is a course designed to prepare second year students with the skills necessary to plan and execute an active job search. Topics covered include: resumes; personal data files; letters of application; and interviewing techniques. Students will prepare a strategy for finding and obtaining a position that best fits their goals and interests.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-117) and (150-128) and (152-150)

Complete Course Listing

**150-183 Windows Enterprise Server Administration 1****Credits:** 1

In this course students will explore concepts and principles of advanced Active Directory Administration. Students will have the opportunity to design and create a directory structure based on a given scenario, as well as utilize Active Directory and command line utilities.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-184 Windows Enterprise Server Administration 2****Credits:** 1

In this course students will practice creating industry-standard technical documentation and user group policy, as it pertains to Active Directory administration. Students will also practice creating an AD replication plan.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing



**150-185 Windows Enterprise Server Administration 3****Credits: 1**

In this course students will practice and demonstrate their ability to manage storage and file services, as well as manage file server roles and features.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-186 LAN Switching & Wireless 1****Credits: 1**

In this course students will explore concepts and principles of wireless fundamentals. Students will identify various network standards and related certifications. Students will also identify components of wireless infrastructure and client devices used in wireless networking.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-185)

Complete Course Listing

**150-187 LAN Switching & Wireless 2****Credits: 1**

In this course students will explore antenna technology, communication, and security fundamentals for wireless networking.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-186)

Complete Course Listing

**150-188 LAN Switching & Wireless 3****Credits: 1**

In this course students will practice design for wireless networks, as well as installing, configuring, and troubleshooting a wireless network.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-187)

Complete Course Listing

**150-189 System Analysis & Design 1****Credits: 1**

In this course students will explore concepts involved in a small-to-medium sized information systems project from inception to implementation. Students will practice using Microsoft Project.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**150-190 System Analysis & Design 2****Credits: 1**

In this course students will examine and compare traditional analysis and design methodologies as well as object-oriented methodologies.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-189)

Complete Course Listing

**150-191 System Analysis & Design 3****Credits: 1**

In this course students will practice using Microsoft Visio to diagram various components of systems as part of systems analysis. Students will also practice verbal and written communication processes in support of users and team members.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-190)

Complete Course Listing

**150-192 Server & Data Center Virtualization 1****Credits: 1**

In this course students will explore fundamental concepts of virtualization software. Students will practice planning for, installing, and configuring this software.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (150-191)

Complete Course Listing

**150-193 Server & Data Center Virtualization 2****Credits: 1**

In this course students will configure standard switches, install and configure virtualization software, manage shared storage, and deploy virtual servers in an enterprise environment.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-192)

Complete Course Listing

**150-194 Server & Data Center Virtualization 3****Credits: 1**

In this course students will engage in the back up, recovery, and migration of virtual machines.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-193)

Complete Course Listing

**150-195 Advanced LAN/WAN Topics 1****Credits: 1**

In this course students will practice configuring WAN protocols, setting up a server in an enterprise environment, and installing and configuring BGP.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-194)

Complete Course Listing

**150-196 Advanced LAN/WAN Topics 2****Credits: 1**

In this course students will practice configuring QoS in an enterprise environment, designing and IP installation and migration, and implementing secure routing updates.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-195)

Complete Course Listing

**150-197 Advanced LAN/WAN Topics 3****Credits:** 1

In this course students will practice installing an enterprise level firewall, setting up VPN, and implementing VLAN in an enterprise network. Students will also practice creating documentation for these procedures.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (150-196)

Complete Course Listing

## Laboratory Assistant (513)

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**Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**513-109 Blood Bank****Credits:** 4

This course focuses on blood banking concepts and procedures including blood typing, compatibility testing, work ups for adverse reaction to transfusions, disease states and donor activities.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (513-110 or 506-101) and (513-115)

Complete Course Listing

**513-110 Basic Laboratory Skills****Credits:** 1

This course explores health career options and the fundamental principles and procedures performed in the clinical laboratory. You will utilize medical terminology and basic laboratory equipment. You will follow required safety and infection control procedures and perform simple laboratory tests.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (513-113 or 804-107)

Complete Course Listing

**513-111 Phlebotomy****Credits:** 2

This course provides opportunities for learners to perform routine venipuncture, routine capillary puncture and special collection procedures.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Medical Laboratory Technician Program.**Pre-requisites:** (Background Check, P or Background Check, N) and (513-113)**Co-requisites:** (806-177)

Complete Course Listing

**513-113 Quality Assurance Laboratory Math****Credits:** 1

This course focuses on performing the mathematical calculations routinely used in laboratory settings. You will explore the concepts of quality control and quality assurance in the laboratory.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**513-114 Urinalysis****Credits:** 2

This course prepares you to perform a complete urinalysis which includes physical, chemical and microscopic analysis. You will explore renal physiology and correlate urinalysis results with clinical conditions.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (513-110 or 506-101)

Complete Course Listing

**513-115 Basic Immunology Concepts****Credits:** 2

This course provides an overview of the immune system including laboratory testing methods for diagnosis of immune system disorders, viral and bacterial infections.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (Background Check, P or Background Check, N) and (513-113) or 506-101)**Co-requisites:** (513-110 and (806-177 or 806-197)

Complete Course Listing

**513-116 Principles of Phlebotomy****Credits:** 3

Principles of Phlebotomy prepares the learner to function as a member of the healthcare delivery team, performing the role of a phlebotomist. The Phlebotomist generally works in a clinical laboratory under the supervision of the appropriate professional. He/She is responsible for collection procedures in both outpatient clinical and hospital inpatient settings for the purpose of laboratory analysis, including emergency and routine collection procedures from veins and skin punctures areas on patients of all age groups. Specimen integrity is emphasized as dependent on collection procedures, proper choice of equipment and knowledge of patient variables. Positive patient identification protocol is an absolute requirement which is stressed throughout as well as transport and processing of specimens. This theory course is designed to prepare the student to enter the laboratory/practicum experience of the program.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Phlebotomy Technician Program.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (501-101)

Complete Course Listing

**513-120 Basic Hematology****Credits:** 3

This course covers the theory and principles of blood cell production and function, and introduces you to basic practices and procedures in the hematology laboratory.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (513-110 or 506-101)

Complete Course Listing

**513-121 Coagulation****Credits: 1**

This course introduces the theory and principles of coagulation and explores mechanisms involved in coagulation disorders. Emphasis is placed upon laboratory techniques used to diagnose disease and monitor treatment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (513-110 or 506-101)**Co-requisites:** (513-120)

Complete Course Listing

**513-130 Advanced Hematology****Credits: 2**

This course explores mechanisms involved in the development of hematological disorders. Emphasis is placed upon laboratory techniques used to diagnose disorders and monitor treatment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 513-120

Complete Course Listing

**513-133 Clinical Microbiology****Credits: 4**

This course presents the clinical importance of infectious diseases with emphasis upon the appropriate collection, handling and identification of clinically relevant bacteria. Disease states, modes of transmission and methods of prevention and control, including antibiotic susceptibility testing, will also be discussed.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 806-197

Complete Course Listing

**513-134 Clinical Chemistry****Credits: 4**

Introduces clinical chemistry techniques and procedures for routine analysis using photometric, potentiometric and separation techniques. Topics in this course include pathophysiology and methodologies for carbohydrate, lipids, proteins, renal function and blood gas analysis.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (513-110) and (806-177) and (806-199)

Complete Course Listing

**513-140 Advanced Microbiology****Credits: 2**

This course provides an overview of acid fast organisms, fungi, parasites, and anaerobic bacteria. The organisms, their pathophysiology, epidemiology, the diseases and conditions that they cause, laboratory methods of handling, culturing and identification will be discussed.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 513-133

Complete Course Listing

**513-147 Phlebotomy Practicum****Credits: 4**

Phlebotomy Practicum prepares the learner to function as a staff member in a medical laboratory setting performing venipuncture and other specimen collection procedures on actual patients. Students learn how to process and handle laboratory specimens as well as learning how to function in a busy medical laboratory environment.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Phlebotomy Technician Program.**Pre-requisites:** 513-116

Complete Course Listing

**513-151 Clinical Experience 1****Credits: 3**

In this clinical you will practice the principles and procedures of laboratory medicine as an entry level Clinical Laboratory Technician in a clinical laboratory setting. You will learn to operate state of the art instruments and report results on Laboratory Information Systems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (513-109) and (513-110) and (513-111) and (513-113) and (513-114) and (513-115) and (513-120) and (513-121) and (513-130) and (513-131) and (513-132) and (513-133)**Co-requisites:** (513-140)

Complete Course Listing

**513-152 Clinical Experience 2****Credits: 4**

Provides continuing practice for the principles and procedures of laboratory medicine as an entry level Clinical Laboratory Technician in a clinical laboratory setting. You will learn to operate state of the art instruments and report results on Laboratory Informations Systems.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (513-109) and (513-110) and (513-111) and (513-113) and (513-114) and (513-115) and (513-120) and (513-121) and (513-130) and (513-131) and (513-132) and (513-133)**Co-requisites:** (513-140)

Complete Course Listing

**513-153 Clinical Portfolio****Credits: 1**

Students prepare a portfolio of professional experiences, assessments and evaluations, clinical reports, class project summaries, a log of community service or professional activities performed while in the MLT program and resume for MLT employment.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (513-151) and (513-152)

Complete Course Listing

**513-170 Introduction to Molecular Diagnostics****Credits:** 2

The course will focus on normal flow of genetic information within the cell, as well as nucleic acid packaging and modification. Learners will analyze DNA and RNA structure and function. Basic genetic inheritance will be examined as well. Learners demonstrate isolation, amplification, and sequencing reactions in the lab. Learners use molecular techniques in the identification of microorganisms and the characterization of specific gene loci.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (806-199) and (806-197)

Complete Course Listing

## Logistics and Materials Management (182)

Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**182-103 Introduction to Supply Chain Management****Credits:** 3

The course will provide an understanding of the fundamental concepts of supply chain management. The learner will explore all functional areas of supply chain management with an integrated view of procurement, manufacturing and operations management, transportation and logistics, inventory and warehousing, demand planning, scheduling and performance management.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (AccuPlacer Reading Comp, 076 or COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree or 801-195 or 801-196 or 801-198 or 804-123 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**182-104 Inventory Management****Credits:** 3

This course will have learners analyze the role of inventory within the supply chain. The learner will apply decision-making skills and complete activities on topics including inventory control, performance measurements, inventory flow, physical inventory management, and warehouse and distribution center management. Learners will also incorporate related technology and integrated forecasting, planning, scheduling, and transportation topics.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 182-103

Complete Course Listing

**182-105 Negotiations****Credits:** 1

This course develops the learner's understanding of the principles, strategies, and tactics of effective negotiation and professional relationship management. The learner will be able to identify and assess the variables in negotiations, develop sound negotiation planning techniques as well as an understanding of various strategies and tactics to resolve conflicts, contractual and interpersonal differences.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (AccuPlacer Reading Comp, 076 or COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or Test Waived-College Degree or 801-195 or 801-196 or 801-198 or 804-123 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**182-106 Purchasing****Credits:** 3

This course will develop the learner's understanding of the role of purchasing within an organization. Learners will explore basic purchasing activities such as supplier selection and management, demand forecasting, purchasing procedures, monitoring customer orders, contingency planning, and cost management. The course prepares learners to assess technology, quality, legal, ethical, and global considerations as they relate to purchasing decisions.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 182-103

Complete Course Listing

**182-107 Distribution & Logistics****Credits:** 3

This course will develop the student's understanding of logistics within a supply chain including the flow of goods and information from the point of origin to the point of consumption. Students will analyze topics such as facility location, order management and distribution, packaging and materials handling, and transportation. Students will complete an in-depth evaluation of transportation management including classification, documentation, contracts, and freight claims. Global transportation, transportation services, forward and reverse logistics, and related technology will also be explored.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 182-103

Complete Course Listing

**182-108 Supply Chain Management Internship****Credits:** 2

This course will provide learners with industry based exposure while learning how supply chain management processes work in organizations. The learner will gain on-the-job experience and training as they apply knowledge gained throughout the program to real life professional situations. Formal approval by the Dean of Business / Program Coordinator is required.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (182-103) and (182-104) and (182-106) and (182-107)

Complete Course Listing

## Marketing (104)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

### 104-100 Social Media Marketing 1

**Credits:** 1

Social Media Marketing 1 introduces the learner to social media communications technologies, and their impact on marketing strategy, marketing communications, and marketing research.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (104-102)

Complete Course Listing

### 104-101 Social Media Marketing 2

**Credits:** 1

In Social Media Marketing 2, learners apply the various social media tools to the marketing mix strategies and practices using social media tools in addition to investigating common practices of search engine optimization.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (104-100)

Complete Course Listing

### 104-102 Marketing Principles

**Credits:** 3

This course introduces core marketing concepts and terminology for Marketing and non-Marketing students. In addition to developing the rationale for a marketing approach to strategic planning, specific topics include target market selection and issues related to product, price, distribution, and promotion decisions.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

### 104-104 Selling Principles

**Credits:** 3

Learners will discover the personal and occupational applications of selling (defined as "an interpersonal persuasive process designed to influence some person's decision"). Selling is investigated from the following viewpoints: personal, industrial, wholesale, retail, door-to-door, and service. Students also learn and practice the professional principles involved in relationship selling.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

### 104-108 Website Administration for Marketers

**Credits:** 2

This course is designed for the non-technical person who wishes to understand and implement good website design concepts, security of the website, search engine optimization, and the day-to-day administration of a company's website and social media sites. Technology will be reviewed in layman's terms to prepare the student for working in today's marketing environments.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** 104-102

Complete Course Listing

### 104-109 Social Media Marketing

**Credits:** 3

This course provides an overview in effective use of social media tools to conduct marketing activities for target markets. Students will learn how to integrate social media tools into the marketing plan and will learn how to write effectively when using specific social media tools such as Facebook, Twitter, or blogging from company websites.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (104-102) and (104-117) and (801-195 or 801-136)

Complete Course Listing

### 104-112 Social Media Marketing 3

**Credits:** 1

In Social Media Marketing 3, learners assess social media marketing goal achievement, and demonstrate skills in effective writing in the social media environment using specific social media tools such as Facebook, Twitter, or blogging from company websites. Emphasis is placed on effective content writing and marketing along with optimal SEO (Search Engine Optimization).

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (104-101)

Complete Course Listing

### 104-113 Marketing Career Strategies

**Credits:** 2

Traditional and alternative career search techniques are explained in this course. Emphasis is placed on both standard job application procedures and alternative techniques most often recommended by employers, recruiters, and other employment/personnel specialists. Students will complete a portfolio project that can be used to assist them with career search strategies and interviewing. Students should enroll in this course in their final semester of the Marketing Program.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (102-156) and (104-109) and (104-117) and (104-144) and (104-160)

**Co-requisites:** (104-118) and (104-146)

Complete Course Listing

### 104-114 Integrated Marketing Communications 1

**Credits:** 1

Integrated Marketing Communications 1, integrates the marketing mix and the promotion plan, targets markets for promotion, and develops situational analysis for a consumer good product. This course provides a broad overview of the entire spectrum of paid and non-paid activities designed to encourage the purchase of products and services.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (104-124) and (104-112)

Complete Course Listing

### 104-115 Integrated Marketing Communication 2

**Credits:** 1

In Integrated Marketing Communications 2, the learner selects and applies creative approaches that support promotional strategies and position in the marketplace. The learner also integrates sales promotion and personal selling in the promotion plan.

**Aid Code:** 10 - Associate Degree.

**Co-requisites:** (104-114)

Complete Course Listing



**104-116 Integrated Marketing Communication 3****Credits:** 1

In Integrated Marketing Communications 3, the learner assesses publicity as an element of the promotion plan and integrates advertising and point-of-purchase into the plan. In this course, the learner develops an integrated marketing communications program and explore digital marketing's transformative impact on traditional marketing practices and examines digital segmentation, digital marketing around the globe, digital divide, digital privacy, and digital analytics.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (104-115)

Complete Course Listing

**104-117 Integrated Marketing Communications****Credits:** 3

This course provides a broad overview of the entire spectrum of paid and non-paid activities designed to encourage the purchase of products and services, including, but not exclusive to, advertising, display, publicity/ news releases, public relations, packaging, special events and sales promotion.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (104-102) and (801-195 or 801-136)**Co-requisites:** (801-196)

Complete Course Listing

**104-118 Marketing Design Concepts****Credits:** 3

This course examines the aesthetic, symbolic, and technical qualities of color that challenge the designer. Students will refine their use of the design principles using layout and composition techniques to solve design problems relevant to desktop publishing, web design, and/or any form of marketing communication. Applications to effective web marketing will be explored.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 104-144

Complete Course Listing

**104-120 Introduction to e-commerce 1****Credits:** 1

Introduction to E-Commerce 1 provides an overview of electronic commerce. Business models underlying electronic commerce applications are studied from both an operational and strategic perspective. The learner is introduced to World Wide Web jargon and applications used in e-commerce. The role of marketing personnel in e-Commerce is explored.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (104-102) and (104-124) and (104-112) and (104-116)

Complete Course Listing

**104-121 Introduction to e-commerce 2****Credits:** 1

In the Introduction to E-Commerce 2 course, the learner reviews and analyzes e-commerce applications in a marketing plan, including the proper applications of social media marketing. Technology trends including electronic payment and related issues of authentication, security, privacy, intellectual property rights, and tax implications are explored.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (104-120)

Complete Course Listing

**104-122 Introduction to E-Commerce 3****Credits:** 1

In Introduction to E-Commerce 3, the learner applies e-commerce concepts in determining its effect on the strategic plan and financial outcomes of business.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-111)**Co-requisites:** (104-121)

Complete Course Listing

**104-123 Marketing Research****Credits:** 3

The Marketing Research course introduces students to the marketing research process and the various methods of collecting primary and secondary data. Learners will analyze marketing research case studies and will be introduced to guidelines for the ethical treatment of participants, sponsors, and researchers and will be introduced to qualitative and quantitative marketing data. Learners will review qualitative and quantitative research methods, practice data collection methods and techniques, and design research instruments including surveys, interviews, and focus groups. Learners will practice determining appropriate sampling and sample size for research projects and will designs a market research proposal, determines sample size, designs research tools & pilot tests research tools. Upon instructor approval, the learner prepares, and analyzes the collected data using software, prepares a written research report and presents findings to the class.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (104-116) and (104-122)

Complete Course Listing



**104-124 Advertising and Branding****Credits:** 3

In Advertising and Branding, learners are introduced to the evolution of advertising and branding and the importance of understanding the target audience. Learners explore the functions and costs of advertising. The learning and process focuses on integrating advertising into an overall marketing strategy. This course introduces the learner to the real world of advertising and its diversity, its processes and principles, its people and the professional experiences and ways thinking. Learners practice planning and creating advertisements that support product brands using a variety of communication channels and practice creating advertising campaign budgets. In addition, learners will practice copywriting skills to garner call-to-action of the targeted market. learners plan and create complex advertising campaigns for brands they create and market.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (104-102)**Co-requisites:** (201-100) and (201-101) and (201-102)

Complete Course Listing

**104-127 Marketing Plan Development 1****Credits:** 1

In Marketing Plan Development 1, learners evaluate sample-marketing plans and will create an outline for their marketing plan using current marketing communication tools in conjunction with a real business to research, design, create and implement a marketing plan.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (104-122) and (104-116) and (104-123)

Complete Course Listing

**104-128 Marketing Plan Development 2****Credits:** 1

In Marketing Plan Development 2, learners continue working on their marketing plans with emphasis on the development, organization, implementation and control of the marketing plan.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (104-127)

Complete Course Listing

**104-129 Marketing Plan Development 3****Credits:** 1

In Marketing Plan Development 3, learners finalize their comprehensive marketing plans and prepare a final professional presentation to students and local employers.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 104-128

Complete Course Listing

**104-130 Fundamentals of Customer Service****Credits:** 3

This course is designed for learners who desire training in the fundamentals of customer service as they relate to business. It introduces core customer service concepts and an overview of the essential skills needed to succeed in any organization. In addition to dealing with internal and external audiences, specific topics include: listening techniques, verbal and nonverbal communication, dealing with various customer types, use of technology, handling a variety of complex customer situations, as well as an overview of careers within the customer service industry.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**104-131 Relationship Management Customer Service****Credits:** 3

Effectively managing relationships with customers is critical to any successful customer service operation. Learners will explore strategies to identify customer needs, communicate effectively, and demonstrate professional work attitudes and ethics. Hands-on activities will help develop interpersonal and intrapersonal skills and an appreciation for various cultures and customers.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**104-132 Time Management and Problem Solving****Credits:** 3

Learn techniques for prioritizing work, handling multiple tasks, and managing change. This course is designed for anyone interested in improving their customer service skills. Participants will also learn how to resolve conflict and improve working relationships with customers and peers.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**104-133 Sales Skills for Customer Service****Credits:** 3

This course is designed for learners who seek sales-related training as it applies to the role of a customer service agent. Concepts such as up selling and cross selling will be discussed as well as basic sales information such as profits and losses, referrals, finding alternative solutions, and use of resources available to customer service personnel.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**104-134 Principles of Inside Sales****Credits:** 3

This course will focus on the tools, strategies and techniques of inside sales including: pre-call planning, prospecting and qualifying leads, developing value statements, the role of social media in the sales process and follow up. This course will place special emphasis on the hands on application of a Customer Relationship Management (CRM) system and other technologies.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (104-100)

Complete Course Listing

**104-135 Quality Customer Service****Credits:** 3

This course addresses sensitivity in communicating with external and internal customers and understanding behavioral styles. Develop verbal and nonverbal communication skills, as well as understanding customer service in a diverse population. Emphasize teamwork, working relationships, and telephone skills.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**104-136 Principles of Outside Sales****Credits:** 1

This course will focus on the tools, strategies and techniques of outside sales including pre-visit planning, prospecting and qualifying leads, conducting research on competing products and companies, the role of cold call visits in the sales process and follow up. This course will place special emphasis on professional sales presentations, personal brand management, and identifying organizational gatekeepers.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**104-137 Digital Marketing Internship****Credits:** 1

Marketing students complete an on-the-job training plan based on a three-way agreement between an approved employer/sponsor, the student/intern, and the college. Participation in the internship involves marketing-related or specialist employment based on the student's marketing career goals. Students are provided with an opportunity to learn operational skills not taught in the classroom.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (104-112) and (104-116) and (104-122)**Co-requisites:** (104-123) and (104-129)

Complete Course Listing

**104-139 Advanced Professional Selling****Credits:** 3

This course focuses on a variety of strategies and techniques for professional selling including: sales presentations, exposure to the software that aids sales people, coordination with the firm's other functional areas, team selling, and negotiation. This course will help relate theory to practice and will include close work with an actual salesperson.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (104-134) and (104-135) and (104-136)

Complete Course Listing

**104-140 e-Commerce Principles****Credits:** 3

This course provides an overview of electronic commerce. Business models underlying these electronic commerce applications are studied from both an operational strategic perspective. A review is made of WWW technology trends including electronic payment and related issues of authentication, security, privacy, intellectual property rights, and tax implications. The role of marketing personnel in e-Commerce will be explored.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 103-106

Complete Course Listing

**104-141 Sales Team Management****Credits:** 3

This course will focus on the responsibility and functions of a sales manager including an evaluation of various sales organizational structures, sales forecasting, budgeting, ethics in sales, and an overview of best practices in recruiting, selecting, testing and training salespeople. Special attention will be paid to retaining, compensating, and motivating sales teams.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**104-142 Sales Management Practicum****Credits:** 1

Students complete an on-the-job training plan based on a three-way agreement between an approved employer/sponsor, the student/intern, and the college. Participation in the internship involves sales-related or specialist employment based on the student's sales career goals. Students are provided with an opportunity to learn operational skills not taught in the classroom.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (104-139) and (104-141)

Complete Course Listing

**104-144 Desktop Design****Credits:** 3

Students will learn how to use computer and multimedia technology to plan, design, and execute marketing related communications activities within the business firm. Students will learn to use Desktop Publishing and Desktop Design hardware and software suitable for both in-house, or electronic pre-press production of catalogs, brochures, flyers, posters, and product information sheets.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (104-117) and (801-195 or 801-136) and (103-106)

Complete Course Listing

**104-146 Marketing Management****Credits:** 3

This fourth-semester course instructs students in decision making relative to the marketing mix with special emphasis on the development, organization, implementation, and control of the marketing plan. This capstone course will help the learner analyze the available research data and then, when necessary, modify the data on the basis of logic and reason. The course helps the learner make not only informed marketing decisions, but also build rationale to defend it. Case studies and/or simulations used in class are designed to improve business acumen and managerial judgment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 104-160

Complete Course Listing

**104-154 Supervised Occupational Experience-Marketing****Credits:** 2

Marketing students complete an on-the-job training plan based on a three-way agreement between an approved employer/sponsor, the student/intern, and the college. Participation in the supervised occupational experience involves marketing-related, mid-management or specialist employment based on the student's marketing career goals. Students are provided with an opportunity to learn operational skills not taught in the classroom.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (104-104) and (104-190) and (196-135) and (102-156) and (104-109) and (104-144) and (104-160)

Complete Course Listing

**104-160 Marketing Research****Credits:** 3

The emphasis of this course will be on the collection of primary data through marketing research methodologies: observation, focus groups, interviews, and surveys. The course will also introduce students to the various methods of collecting secondary data. Concepts will be reinforced through group projects.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 104-102

Complete Course Listing

**104-190 Retail Principles****Credits:** 3

This course includes a study of considerations and opportunities of selling goods and services to the final consumer. Topics include an overview of the end user, store design, securing and controlling inventory, pricing, promotions, and future trends. An analysis is made of the basic activities of running a retail store.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 801-196

Complete Course Listing

## Mathematics (804)

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Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**804-107 College Mathematics****Credits:** 3

This course is designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between U.S. and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or Test Waived-College Degree or 834-109 or 834-109) or (AccuPlacer Arithmetic, 089 or (AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030))

Complete Course Listing

**804-113 College Technical Mathematics 1A****Credits:** 3

Topics include: solving linear, quadratic, and rational equations; graphing; formula rearrangement; solving systems of equations; percent; proportions; and operations on polynomials. Emphasis will be on the applications of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Numerical Skills, 45 or Compass Algebra, 046 or ACT Math, 20 or 804-110 or 834-110 or (AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 050) or SAT Mathematics, 390) or (Next Gen AccuPlacer Arithmetic, 272 and Next Gen AccuPlacer QRAS, 243)

Complete Course Listing

**804-114 College Technical Mathematics 1B****Credits:** 2

This course is a continuation of College Technical Mathematics 1A. Topics include: measurement systems; computational geometry; right and oblique triangle trigonometry; and trigonometric functions on the unit circle. Emphasis will be on the application of skills to technical problems. Successful completion of or concurrent enrollment in College Technical Mathematics 1A is required for course enrollment. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 804-113

Complete Course Listing

**804-115 College Technical Mathematics 1****Credits:** 5

Topics include: solving linear, quadratic, and rational equations; graphing; formula rearrangement; solving systems of equations; percent; proportions; measurement systems; computational geometry; right and oblique triangle trigonometry; trigonometric functions on the unit circle; and operations on polynomials. Emphasis will be on the application of skills to technical problems.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 45 or Compass Algebra, 046 or Next Gen AccuPlacer Arithmetic, 272) and (Next Gen AccuPlacer QRAS, 243) or (ACT Math, 20 or 804-110 or 834-110 or (AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 50))

Complete Course Listing

**804-118 Intermediate Algebra with Applications****Credits:** 4

This course offers algebra content with applications. Topics include properties of real numbers, order of operations, algebraic solution for linear equations and inequalities, operations with polynomial and rational expressions, operations with rational exponents and radicals, algebra of inverse, logarithmic and exponential functions.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 45 or Compass Algebra, 046 or ACT Math, 20 or 804-110 or 834-110 or AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 050) or (Next Gen AccuPlacer Arithmetic, 272 and Next Gen AccuPlacer QRAS, 243)

Complete Course Listing

**804-123 Math with Business Applications****Credits:** 3

This course covers...real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, apply math concepts to the purchasing/buying process, apply math concepts to the selling process, and basic statistics with business/consumer applications.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or 809-198 or 809-199 or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198) and (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or Test Waived-College Degree or 834-109 or 834-109) or (AccuPlacer Arithmetic, 089 or AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030) or (Next Gen AccuPlacer Arithmetic, 272) or (Next Gen AccuPlacer Arithmetic, 257 and Next Gen AccuPlacer QRAS, 210)

Complete Course Listing

**804-133 Math and Logic****Credits:** 3

Students will apply mathematical problem solving techniques. Topics will include symbolic logic, sets, algebra, Boolean algebra, and number bases.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or Test Waived-College Degree or 834-109 or 834-109) or (AccuPlacer Arithmetic, 089) or (AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or SAT Reading, 330 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree) or (838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**804-134 Mathematical Reasoning****Credits:** 3

All college students, regardless of their college major, need to be able to make reasonable decisions about fiscal, environmental, and health issues that require quantitative reasoning skills. An activity based approach is used to explore numerical relationships, graphs, proportional relationships, algebraic reasoning, and problem solving using linear, exponential and other mathematical models. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Test Waived-College Degree) and (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 44 or ACT Math, 17 or Test Waived-College Degree or AccuPlacer Arithmetic, 089) or SAT Mathematics, 390 or (AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030) or (Next Gen AccuPlacer Arithmetic, 272) or (Next Gen AccuPlacer Arithmetic, 257 and Next Gen AccuPlacer QRAS, 210) or (834-109) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104 or (854-805)

Complete Course Listing

**804-189 Introductory Statistics****Credits:** 3

Students taking Introductory Statistics display data with graphs, describe distributions with numbers perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 45 or Compass Algebra, 046 or ACT Math, 20 or 804-106 or 804-107 or 804-118 or 804-110 or 834-110) or (AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 050) or (Next Gen AccuPlacer Arithmetic, 272 and Next Gen AccuPlacer QRAS, 243)  
Complete Course Listing

**804-195 College Algebra w Apps****Credits:** 3

This course covers those skills needed for success in Calculus and many application areas on a baccalaureate level. Topics include the real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinatorics, and the binomial theorem.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**804-196 Trigonometry w Apps****Credits:** 3

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles complex numbers, DeMoivre's Theorem, polar coordinates, and vectors.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 49 or Compass Algebra, 066 or ACT Math, 23 or 804-110)

Complete Course Listing

**804-198 Calculus 1****Credits:** 4

Analyze and graph algebraic expressions, especially conic sections. Develop an intuitive understanding of limits, derivatives and integrals. Apply the derivative and the integral to certain physical problems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**804-304 Mathematic Fundamentals****Credits:** 2

This course consists of instructional units that incorporate hands on activities and projects. It is intended to give students a review of the basic principles of arithmetic, including whole numbers, fractions, and decimals. Estimation of length, angles and mathematical results is also covered. Additional topics include ratios, proportions, powers, analyzing graphs and an introduction to algebra. Proper calculator usage will be discussed throughout the course.

**Aid Code:** 31 - One-year Technical Diploma.

**Pre-requisites:** (ASSET Numerical Skills, 35 or COMPASS Pre-Algebra Skills, 025 or ACT Math, 15 or AccuPlacer Arithmetic, 050 or Test Waived-College Degree or 854-781 or 854-781 or 854-782 or 854-782 or 854-783 or 854-783 or 854-784 or 854-784 or 854-785 or 854-785 or 854-786 or 854-786 or 854-787 or 854-787)

Complete Course Listing

**804-306 Shop Mathematics I****Credits:** 2

This course includes the basic principles of arithmetic beginning with whole numbers and common fractions, and continuing through decimals, percentages, ratios, proportions and averages, measurements, use of constants and coordinate systems. These principles are applied to typical shop problems throughout the course.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**804-308 Shop Mathematics II****Credits:** 2

This course is a continuation of Shop Mathematics I and includes the study of the properties of circles, volumes and surface areas of various solids, an introduction to practical algebra and trigonometric principles used in solving right triangles as well as applications of the sine and cosine law in solving oblique triangles.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** 804-306

Complete Course Listing

**804-501 Math For Plumbing Appr****Credits:** 1**Aid Code:** 50 - Apprentice.

Complete Course Listing

## Mathematics (854)

Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).



**854-713 BSE Mathematics 1****Credits:** 3

Develops number concepts, mathematical language and whole number topics. This level introduces fractions, decimals, measurements and geometric shapes. Students use critical thinking skills to problem solve, perform computations, estimate results, interpret and develop data, work with appropriate technology and apply mathematics to real-world situations.

**Aid Code:** 73 - Beg ABE (0-5.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**854-762 Math 2****Credits:** 3

This course reviews whole numbers and develops fractions, decimals, measurements, mathematical language, percents, ratios, and proportions. This level may introduce basic algebra and geometry concepts. Students use critical thinking skills to problem solve, perform computations, estimate results, interpret and develop data, work with appropriate technology and apply mathematics to real-world situations. Successful completion of Math 2 is required for progression to Math 3. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).

**Pre-requisites:** (COMPASS Pre-Algebra Skills, 001 or AccuPlacer Arithmetic, 020 or ACT Math, 01 or Next Gen AccuPlacer Arithmetic, 200)  
Complete Course Listing

**854-763 BSE Mathematics for Accuplacer****Credits:** 2

This course will provide instruction in math skills needed to be successful on the ACCUPLACER math test.

**Aid Code:** 74 - Interm ABE (6.0-8.9).

Complete Course Listing

**854-764 Math 2 GED Review****Credits:** 3

This course develops math skills needed for the Mathematical Reasoning GED test at the pre-GED level. This course reviews whole numbers and develops fractions, decimals, measurements, mathematical language, percents, ratios, and proportions. This level may introduce basic algebra and geometry concepts. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**854-765 BSE Certified Nursing Assistant Mathematics****Credits:** 2

This course will provide instruction in math skills needed to be successful in the Certified Nursing Assistant Program.

**Aid Code:** 74 - Interm ABE (6.0-8.9).

Complete Course Listing

**854-771 BSE Mathematics, GED****Credits:** 3

Introduction to algebra and geometry. A continuation of BSE, Math 2. Provides more advanced, higher level thinking and problem solving skills needed for the GED test.

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).

Complete Course Listing

**854-772 Math 3 GED Review****Credits:** 3

This course reviews whole numbers and develops fractions, decimals, measurements, mathematical language, percents, ratios, and proportions. It includes an introduction to algebra and geometry and provides more higher level thinking and problem solving skills needed for the Mathematical Reasoning GED test. It may also develop math skills needed for the Social Studies and Science GED tests. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**854-778 BSE Mathematics 3, Nursing Mathematics****Credits:** 2

Designed for students entering the Associate Degree Nursing program. Topics will include decimals, fractions, percents, metric measurements, conversions, concentrations, significant figures, scientific notation, working with formulas, and solving for the unknown. Special emphasis will be placed on preparing for the math tests required by the ADN program. This course does NOT satisfy the Program Ready requirement for the ADN program. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

**854-781 Math 3****Credits:** 2

This course will include a review of whole numbers, fractions, ratios, proportions, and percents. It will also focus on English and metric conversions, applied geometry, basic statistics, and graph reading. Finally, students will develop their signed number skills as well as learn how to solve equations after an introduction to basic algebraic concepts. Successful completion of Math 3 with a C or better is required for progression to Pre-Algebra. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).

**Pre-requisites:** (ASSET Numerical Skills, 26 or COMPASS Pre-Algebra Skills, 018 or ACT Math, 13 or AccuPlacer Arithmetic, 030 or Next Gen AccuPlacer Arithmetic, 210 or 854-762)

Complete Course Listing



**854-789 BSE Mathematics 3, Modu Math Algebra****Credits:** 3

This computer program uses practical video segments and drill practice to improve basic math skills, including drill and practice, required for complete mastery of basic operations involving whole numbers, fractions, decimals, percents, and signed numbers.

This introductory algebra course covers basic concepts; order of operations; adding, subtracting and multiplying laws; problem solving; inequalities; graphing; factoring; quadratics and more. Students may use this for the algebra requirement of many apprenticeship programs. \*Credits earned this course will not be counted toward the number of credits needed for any degree.

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

**854-802****Credits:** 1

A small group and individualized instruction course that helps students develop precollege math skills. Emphasizes number operations needed to define and solve algebra and geometry problems and mathematical learning strategies. Must be taken concurrently with Pre-Algebra.

**Aid Code:** 77 - ASE Developmental.

**Pre-requisites:** (COMPASS Pre-Algebra Skills, 24 or ACT Math, 14 or SAT Mathematics, 340 or AccuPlacer Arithmetic, 49 or Next Gen AccuPlacer Arithmetic, 242)

**Co-requisites:** (834-109)

Complete Course Listing

**854-805****Credits:** 1

Highly interactive format providing small group and individualized mathematics instruction that helps students develop mathematical skills and strategies for succeeding in college-level math. Must be taken concurrently with Mathematical Reasoning.

**Aid Code:** 77 - ASE Developmental.

**Pre-requisites:** 854-781 or COMPASS Pre-Algebra Skills, 025 or ACT Reading, 15 or SAT Reading, 340 or AccuPlacer Arithmetic, 050 or Next Gen AccuPlacer Arithmetic, 243

**Co-requisites:** (804-134)

Complete Course Listing

## Mechanical Drafting (421)

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**Information provided includes course descriptions by subject only.**

**For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**421-380 Blueprint Reading(Welding)****Credits:** 2

This course is designed to help the student acquire the ability to visualize spatial relationships between two and three view drawings. Introduction to machine and welding terminology and concepts is acquired by reading a series of prints. A study of welding symbols is covered. The course emphasizes training in visualization and factual information as a means of gaining a working knowledge of the interpretation of prints related to the welding or fabrication industry.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Welding Program.**Co-requisites:** 804-306

Complete Course Listing

**421-385 Blueprint Reading****Credits:** 2

Blueprint reading is really learning a new language where much of it is presented in graphic or symbolic form. Students will learn about different types of drawings, proper drawing structure, and drawing terminology. They will learn to produce simple sketches and visualize two and three-dimensional parts. The experienced machine operator must be able to decipher blueprints in order to produce parts to proper specification.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**421-390 Blueprint Reading Maintenance****Credits:** 3

This course focuses on reading and interpreting blueprints, drawings and graphic symbols used in industry. Students will gain experience in the ability to visualize spatial relationships between single and multiple-view drawings. Time is spent interpreting actual blueprints. Students will be able to interpret a variety of prints such as machining, mechanical, or assembly prints.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Industrial Mechanic Program.

Complete Course Listing

## Mechanical Technology (606)

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**Information provided includes course descriptions by subject only.**

**For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**606-119 Introduction to SolidWorks****Credits:** 3

Introduction to SolidWorks is intended to introduce the student to the concepts and commands of parametric solid modeling. Students create sketches and add relationships to the sketch segments, extrude the sketches to create models, add features such as fillets, cut/extrude, chamfers, holes, draft, shell, lofts and sweeps. Emphasis is placed on the design intent of parametric solid models. In addition, students extract 2D documentation from the 3D models and add details to the drawings.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 606-127

Complete Course Listing

**606-120 Strength of Materials****Credits:** 3

A study is made of the behavior of machine parts and structural members that are in service. Various types of loads and the effects of those loads are examined. Failure modes are examined and calculated to assure proper machine design and function.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 804-114

Complete Course Listing

**606-123 Interpreting Engineering Graphics****Credits:** 2

This is a course designed to introduce the student to the concepts, equipment and tools associated with Mechanical Drafting. The course is a precursor to more advanced subject matter discussed in later program classes.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**606-124 Orthographic Projection****Credits:** 3

ANSI Standards, as related to drafting, are introduced. The principles for orthographic projection and techniques for layout of multi-view drawings are introduced. Subject areas include ANSI regulations/standards, primary planes of projection and applied orthographic projection. Dimensioning basics are covered.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**606-125 Drafting Representations****Credits:** 2

Internal features expressed through sections and drafting conventions are examined. Auxiliary, successive auxiliary, revolution and applied descriptive geometry are used extensively in the course. A brief introduction to pictorials is covered.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (606-124) and (606-127)

Complete Course Listing

**606-126 Fasteners and Processes****Credits:** 3

An in-depth look at threaded fasteners and screw thread systems is taken. Working strength of various threads to assess mode of failure as well as specific stress and strain calculations are discussed. Welding terminology and symbology are introduced.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (606-124) and (606-127)

Complete Course Listing

**606-127 Two-Dimensional Computer Aided Drafting (CAD)****Credits:** 3

All aspects of two-dimensional computer aided drafting are explored. This is a foundation for more advanced editing and dimensioning as well as three-dimensional computer aided renderings.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**606-128 Three-Dimensional Computer Aided Drafting (CAD)****Credits:** 3

This is a hands-on drawing course in the latest Mechanical Design nuance known as 3-D drafting. The student will learn time saving techniques for constructing solid models for use in the industrial design field.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (606-124) and (606-127)

Complete Course Listing

**606-129 Kinematics****Credits:** 3

The student takes an in-depth look at the study of motion as related to machines and the design and selection of belts, gears, cams and eccentrics. Linear and rotational motion is discussed as well as specific displacement. Also discussed are bearings and clutches/brakes.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**606-130 Actuators****Credits:** 3

In this course, the basics of creating movement through the use of electricity, electric motors, hydraulics and pneumatics are discussed. This course is intended to give the student a basic understanding of the various machine design applications he/she may encounter in industry.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**606-131 Geometric Dimensioning and Tolerancing****Credits:** 2

GD&T introduces the student to the differences between conventional tolerancing and geometrical tolerancing. An emphasis is put on interpretation and application of the proper GD&T symbology given the function of the part and according to ANSI Standards.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**606-132 Design Applications****Credits:** 2

A culmination of the total program is reached in this course. Multiple projects are assigned to strengthen the student's ability to perform in the design field. This course allows the student to be creative in their design selection, and to defend/explain the selection based on necessary criteria.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**606-133 Descriptive Geometry****Credits:** 2

Descriptive Geometry is designed to broaden the applicable knowledge of different techniques employed in the graphical solution of problems involving spatial relationships between points, lines, planes and solids. Within the course, special consideration is given to the techniques of rotation, auxiliary and surface development, as well as surface classification in the practical application of trade problems. The student learns when to use the most appropriate technique, given a specific problem, as well as alternate techniques to solve for the same problem.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Medical Administrative Coder (160)

**Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**160-103 Medical Transcription****Credits:** 4

This course provides the student with instruction using audio equipment and medically oriented materials. Emphasis is placed on developing the ability to use references to produce accurate, correctly formatted medical reports in an efficient manner, using correct spelling, punctuation, proofreading, and grammar. Medical report style and format are reviewed. The student will produce various medical and surgical reports representative of those typed in hospitals and clinics using a word processing program. Students should also have a strong background in grammar, punctuation, medical terminology, and medical document formatting.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (160-105 or 106-105) and (160-118 or 106-118) and (Typing Score, 040)

Complete Course Listing

**160-105 Medical Editing and the Electronic Medical Record****Credits:** 3

The emphasis of this course is on the creation and editing of medically oriented documents. The AHDI Book of Style will be used during a module that will include an introduction to transcription. Analysis and summarization of medical records will be covered. Students will edit speech recognition files and learn to take meeting minutes through role playing scenarios. Work will be done to improve keyboard speed and accuracy through the use of timed writings.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-120 or 160-120 or 501-101) and (106-127 or 106-185) and (806-194 or 806-177) and (Typing Score, 35)

Complete Course Listing

**160-109 Medical Office Administration****Credits:** 3

In this capstone course, second-year students demonstrate knowledge of skill learned in the Medical Administrative Coder program through the simulation, discussion, research, and teamwork. Units of instruction will also include career development, and professionalism in the health care setting. Students will create a resume package, develop interview skills through mock interview experiences, and create a professional portfolio.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (806-194 or 806-177) and (106-118 or 160-118) and (106-120 or 160-120 or 501-101)

Complete Course Listing

**160-113 Health Insurance****Credits:** 3

The student will gain knowledge and practical skill development in the health care insurance area. This course provides an introduction to health insurance including understanding private and governmental payers, specific health insurance terminology and its meaning, understanding the role of medical coding in the billing of third-party payers for services and procedures received by the patient, linking of codes on the claim form demonstrating medical necessity, privacy and HIPAA, and effectively using technology and resources for problem solving. Student will apply third-party payer (private and governmental) rules when completing CMS-1500 claim forms. The student will also be able to better understand his/her personal insurance coverage.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Writing Skills, 44 or COMPASS Writing Skills, 070 or ACT English, 18 or AccuPlacer Sentence Skills, 083 or Test Waived-College Degree or 831-103 or 831-103 or 801-136 or 801-195) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or 838-104 or 838-104 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**160-114 Healthcare Records Management****Credits:** 3

This course covers the systematic control of information in each phase of the record life cycle: creation, distribution, use, maintenance, and disposition. Topics will include systems of filing and storage (general and medical specific); organizing, managing, and controlling the system; potential careers; and trends in technology. Ethical/legal issues in the healthcare field will be addressed. Information on the EHR/EMR (electronic health record/electronic medical record) will also be covered. Simulations will provide hands-on experience with major filing classification systems in both paper and computer database (EHR) formats. Touch keyboarding and basic computers skills are necessary for this course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-127)

Complete Course Listing

**160-118 Pharmacology for Medical Administrative Coder****Credits:** 2

Pharmacology for MAC (Medical Administrative Coder) will provide an introduction to the use of pharmacology terminology and context. Included is information on medication actions, dosage forms, routes of administration, and drug uses. Students will research and create presentations on the pathophysiology of the human body in conjunction with treatments used to combat various diseases and conditions. Emphasis is on the terminology necessary for medical reports used in transcription and coding.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-120 or 160-120 or 501-101) and (806-194 or 806-177)  
Complete Course Listing**160-120 Medical Terminology for Coding****Credits:** 3

This course provides a combination of the study of medical vocabulary and the application of that vocabulary in an office setting. Students will learn the pronunciation, spelling, definition, and correct usage of medical terms used in a variety of healthcare office applications, with an emphasis on terminology necessary for medical reports used in transcription and coding. Students will also learn how to divide medical words into their component parts: the root word, the suffix, the prefix, and the combining form.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Writing Skills, 44 or COMPASS Writing Skills, 070 or ACT English, 18 or AccuPlacer Sentence Skills, 083 or Test Waived-College Degree or 831-103 or 831-103 or 801-195 or 801-136) and (AccuPlacer Reading Comp, 076 or COMPASS Reading Skills, 073 or ACT Math, 16 or ASSET Reading Skills, 39 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-196 or 801-198 or 804-123 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**160-124 Supervised Occupational Experience-Medical Office****Credits:** 1

In this course, students apply and interview for medical office internship placements. Once selected, the student will apply the knowledge and skills obtained in the classroom to the work environment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-114 or 160-114) and (106-136 or 160-136) and (106-185 or 160-185) and (530-102 or 530-150)

Complete Course Listing

**160-136 Patient Billing and Reimbursement****Credits:** 4

This course emphasizes the accurate processing and trending of health insurance claims, the modifications in state and federal regulations affecting the health insurance industry, private, government, and workers' compensation payer requirements, and abstracting data from source documents. Students will research and analyze topics such as HIPAA privacy standards, HITECH security rule, Conditions of Participation, fraud and abuse, False Claims Act, Stark Law, Truth in Lending Act, and Quality Payment Program.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-113) and (106-120 or 501-101)  
Complete Course Listing**160-185 Medical Microsoft Office Suites****Credits:** 3

Students will learn to use word processing software to create, format, and edit medical documents. Course includes the development of proofreading skills for identifying and correcting punctuation, grammar, spelling, and usage errors. Work will also be done to improve speed and accuracy through the use of timed writings.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-127) and (Typing Score, 30)  
Complete Course Listing

## Medical Assistant (509)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****509-101****Credits:** 2

Introduces medical assistant students to office management, business administration, and the electronic medical record (EMR) in the medical office. Students learn to schedule appointments, perform filing, record keeping, telephone and reception duties, communicate effectively with patients and other medical office staff, and keep an inventory of supplies.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Medical Admin Specialist, Medical Administrative Coder, Medical Assistant Programs.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** 501-101 and 501-107 and (801-136 or 801-195) and 509-102 and 509-109 and 509-303 and 509-304

Complete Course Listing

**509-102****Credits: 3**

Students learn to recognize human body structure and function in health and disease states. Students explore the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis, and prevention of diseases commonly diagnosed and treated in the medical office setting.

**Aid Code:** 10 - Associate Degree.

**Restrictions:** Restricted to students admitted to Medical Admin Specialist, Medical Administrative Coder, Medical Assistant Programs.

**Pre-requisites:** (Background Check, P or Background Check, N)

**Co-requisites:** 501-101 and 509-109 and 509-303 and 509-304 and 509-109 and 501-107 and (801-136 or 801-195)

Complete Course Listing

**509-107****Credits: 2**

Introduces Medical Assistant students to health insurance and finance in the medical office. Students perform bookkeeping procedures, apply managed care guidelines, and complete insurance claim forms. Students use medical coding and managed care terminology to perform insurance-related duties.

**Aid Code:** 10 - Associate Degree.

**Restrictions:** Restricted to students admitted to Medical Assistant Program.

**Pre-requisites:** 501-101 and 501-107 and 509-101 and 509-102 and 801-136 and 509-303 and 509-304

Complete Course Listing

**509-109****Credits: 2**

Prepares students to display professionalism and perform within ethical and legal boundaries in the health care setting. Students maintain confidentiality, examine legal aspects of the medical record, perform quality improvement procedures, examine legal and bioethical issues, and demonstrate awareness of diversity.

**Aid Code:** 10 - Associate Degree.

**Restrictions:** Restricted to students admitted to Medical Admin Specialist, Medical Administrative Coder, Medical Assistant Programs.

**Co-requisites:** 501-101 and 501-107 and 509-101 and 509-102 and 509-303 and 509-304 and (801-136 or 801-195)

Complete Course Listing

**509-111****Credits: 2**

Introduces students to medication classification, basic pharmacology principles, and supplements. Students apply basic pharmacodynamics to identify common medications and calculate dosages in preparation for medication administration.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** 501-101 and 501-107 and 509-301 and 509-302 and 509-303 and 509-304 and (801-136 or 801-195)

Complete Course Listing

**509-301 Medical Assistant Admin Procedures****Credits: 2**

Introduces medical assistant students to office management, business administration, and the electronic medical record (EMR) in the medical office. Students learn to schedule appointments, perform filing, record keeping, telephone and reception duties, communicate effectively with patients and other medical office staff, and keep an inventory of supplies.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Medical Assistant Program.

**Co-requisites:** (501-107) and (509-302) and (509-303) and (509-304) and (501-101) and (801-195)

Complete Course Listing

**509-302 Human Body in Health & Disease****Credits: 3**

Students learn to recognize human body structure and function in health and disease states. Students explore the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis, and prevention of diseases commonly diagnosed and treated in the medical office setting.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Medical Assistant Program.

**Co-requisites:** (501-101) and (509-301) and (509-303) and (509-304) and (801-195) and (501-107)

Complete Course Listing

**509-303 Medical Asst Lab Procedures 1****Credits: 2**

Introduces medical assistant students to laboratory procedures commonly performed by medical assistants in a medical office setting. Students perform CLIA waived routine laboratory procedures commonly performed in the ambulatory care setting. Students follow laboratory safety requirements and federal regulations while performing specimen collection and processing, microbiology and urinalysis testing.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Medical Admin Specialist, Medical Administrative Coder, Medical Assistant Programs.

**Co-requisites:** (501-101) and (501-107) and (509-301) and (509-302) and (509-304) and (801-195)

Complete Course Listing

**509-304 Medical Asst Clin Procedures 1****Credits: 4**

Introduces medical assistant students to the clinical procedures performed in the medical office setting. Students perform basic examining room skills including screening, vital signs, patient history, minor surgery and patient preparation for routine and specialty exams in the ambulatory care setting. Learner explores communication principles and psychology theories related to patient care.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Medical Admin Specialist, Medical Administrative Coder, Medical Assistant Programs.

**Co-requisites:** (501-101) and (501-107) and (509-301) and (509-302) and (509-303) and (801-195)

Complete Course Listing

**509-305 Medical Asst Lab Procedures 2****Credits:** 2

Prepares students to perform phlebotomy and Clinical Laboratory Improvement Amendment (CLIA) waived hematology, chemistry, immunology and laboratory procedures commonly performed by medical assistants in the ambulatory care setting.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Medical Assistant Program.**Pre-requisites:** (501-101) and (801-195) and (501-107) and (509-301) and (509-302) and (509-303) and (509-304)**Co-requisites:** (509-306) and (509-307) and (509-308) and (509-309) and (509-310)

Complete Course Listing

**509-306 Medical Asst Clin Procedures 2****Credits:** 3

Prepares medical assistant students to perform patient care skills in the medical office setting. Students perform clinical procedures including administering medications, performing an electrocardiogram, assisting with respiratory testing, coaching patients, and assisting with emergency situations in an ambulatory care setting. Students learn preventive care and principles of nutrition.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Medical Assistant Program.**Pre-requisites:** (501-101) and (801-195) and (501-107) and (509-301) and (509-302) and (509-303) and (509-304)**Co-requisites:** (509-305) and (509-307) and (509-308) and (509-309) and (509-310)

Complete Course Listing

**509-307 Med Office Insurance and Finance****Credits:** 2

Introduces Medical Assistant students to health insurance and finance in the medical office. Students perform bookkeeping procedures, apply managed care guidelines, and complete insurance claim forms. Students use medical coding and managed care terminology to perform insurance-related duties.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Medical Assistant Program.**Pre-requisites:** (501-101) and (801-195) and (501-107) and (509-301) and (509-302) and (509-303) and (509-304)**Co-requisites:** (509-305) and (509-306) and (509-308) and (509-309) and (509-310)

Complete Course Listing

**509-308 Pharm for Allied Health****Credits:** 2

Introduces students to medication classification, basic pharmacology principles, and supplements. Students apply basic pharmacodynamics to identify common medications and calculate dosages in preparation for medication administration.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Medical Assistant Program.**Pre-requisites:** (501-101) and (801-195) and (501-107) and (509-301) and (509-302) and (509-303) and (509-304)**Co-requisites:** (509-305) and (509-306) and (509-307) and (509-309) and (509-310)

Complete Course Listing

**509-309 Medical Law, Ethics and Professionalism****Credits:** 2

Prepares students to display professionalism and perform within ethical and legal boundaries in the health care setting. Students maintain confidentiality, examine legal aspects of the medical record, perform quality improvement procedures, examine legal and bioethical issues, and demonstrate awareness of diversity.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Medical Assistant Program.**Pre-requisites:** (501-101) and (801-195) and (501-107) and (509-301) and (509-302) and (509-303) and (509-304)**Co-requisites:** (509-305) and (509-306) and (509-307) and (509-308) and (509-310)

Complete Course Listing

**509-310 Medical Assistant Practicum****Credits:** 3

Requires medical assistant students to integrate and apply knowledge and skills from all previous medical assistant courses in actual ambulatory health care settings. Learners perform medical assistant administrative, clinical, and laboratory duties under the supervision of trained mentors to effectively transition to the role of a medical assistant. This is a supervised, unpaid, clinical experience.

**Aid Code:** 31 - One-year Technical Diploma.**Restrictions:** Restricted to students admitted to Medical Assistant Program.**Pre-requisites:** (501-101) and (801-195) and (501-107) and (509-301) and (509-302) and (509-303) and (509-304)**Co-requisites:** (509-305) and (509-306) and (509-307) and (509-308) and (509-309)

Complete Course Listing

## Medical Coding (530)

Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).



**530-102 Medical Office Coding I****Credits: 3**

This course prepares learners to assign ICD-CM, CPT, and HCPCS level II medical codes with entry level proficiency. Learners will apply instructional notations, conventions, rules, and official coding guidelines for ICD-CM, CPT, and HCPCS Level II codes. Learners apply skills through coding application from medical documentation and various other coding exercises. Confidentiality and HIPAA will be reinforced throughout the course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-120 or 160-120 or 501-101) and (106-136) or 160-136 and (806-194 or 806-177)

Complete Course Listing

**530-103 Medical Office Coding II****Credits: 3**

This course is a continuation from 530-102 Medical Office coding I and will focus on coding ICD-CM, CPT, and HCPCS Level II codes for Anesthesia, Evaluation and Management, Radiology, and Medicine. Learners will review and apply coding instructional notations, conventions, rules and official coding guidelines in ICD-CM, CPT, and HCPCS Level II codes. Learners will complete research into the application of modifiers. Resources, including the Internet and coding software will be introduced. Confidentiality and HIPAA is reinforced through the course. An active role in team participation will be required.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (530-102 or 530-150)

Complete Course Listing

**530-112 Disease Process and Treatment****Credits: 4**

Prepares learners to interpret clinical documentation that they will encounter in a variety of healthcare settings. Emphasis is placed on understanding the common disorders and diseases of each body system to include the etiology (cause), signs and symptoms, diagnostic tests and results, and medical treatments and surgical procedures.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (501-101) and (806-189 or 806-177)

Complete Course Listing

**530-150 Medical Office Coding I****Credits: 4**

This course prepares learners to assign ICD-CM, CPT, and HCPCS Level II medical codes with entry level proficiency. Learners will apply instructional notations, conventions, rules, and official coding guidelines for ICD-CM, CPT, and HCPCS Level II codes. Learners apply skills through coding application from medical documentation and various other coding exercises. Confidentiality and HIPAA will be reinforced throughout the course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-120 or 160-120 or 501-101) and (106-136 or 160-136) and (806-194 or 806-177)

Complete Course Listing

**530-176 Health Data Management****Credits: 2**

Introduces the use and structure of health care data elements, data sets, data standards, their relationships to primary and secondary record systems and health information processing.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** 530-181

Complete Course Listing

**530-181 Intro to the Health Record****Credits: 1**

This course prepares learners to illustrate the flow of health information in various health care delivery systems and within the health information department. Prepares learners to retrieve data from health records. Professional ethics, confidentiality and security of information are emphasized.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**530-182 Human Disease for Health Professionals****Credits: 3**

Prepares learners to interpret clinical documentation that they will encounter in a variety of healthcare settings. Emphasis is placed on understanding the common disorders and diseases of each body system to include the etiology (cause), signs and symptoms, diagnostic tests and results, and medical treatments and surgical procedures.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (501-101) and (806-194 or 806-195 or 806-177 or 806-189)

Complete Course Listing

**530-184 Current Procedural Terminology Coding****Credits: 3**

Prepares learners to assign CPT codes, supported by medical instructional notations, conventions, rules and official coding guidelines when assigning CPT codes to case studies and actual medical record documentation.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (501-101) and (530-181) and (530-182 or 530-112) and (806-194 or 806-177 or 806-195 or 806-189)

Complete Course Listing

**530-185 HealthCare Reimbursement****Credits: 2**

This course prepares learners to compare and contrast health care payers, illustrate the reimbursement cycle, and to comply with regulations related to fraud and abuse. Learners assign Diagnosis Related Groups (DRGs), Ambulatory Payment Classifications (APCs) and Resource Utilization Groups (RUGs) with entry-level proficiency using computerized encoding and grouping software.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (501-101) and (530-181) and (530-182 or 530-112) and (806-194 or 806-177 or 806-195 or 806-189)

Complete Course Listing

**530-195 Applied Coding****Credits:** 2

Prepares students to assign ICD and CPT/HCPCS codes supported by medical documentation with intermediate level of proficiency. Students will prepare appropriate physician queries in accordance with compliance guidelines and will assign codes to optimize appropriate reimbursement.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (530-197 or 530-197) and (530-199 or 530-199) and (530-184 or 530-184) and (530-185 or 530-185)

Complete Course Listing

**530-197 International Classification of Disease (ICD) Diagnosis Coding****Credits:** 3

Prepares students to assign ICD diagnosis codes supported by medical documentation with entry level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (501-101) and (806-189 or 806-177) and (530-182 and 530-181)

Complete Course Listing

**530-199 International Classification of Disease (ICD) Diagnosis Coding****Credits:** 2

Prepares students to assign ICD procedure codes supported by medical documentation with entry level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (501-101 or 501-101) and (806-189 or 806-189 or 806-177 or 806-177) and (530-182 or 530-182) and (530-181 or 530-181)

Complete Course Listing

## Medical Terminology (501)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****501-101 Medical Terminology****Credits:** 3

Focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systematic and surgical terminology.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**501-107 Digital Literacy for Health Care****Credits:** 2

This course provides an introduction to basic computer functions and applications utilized in contemporary healthcare settings. Students are introduced to the hardware and software components of modern computer systems and the application of computers in the workplace. The use of the common software packages, operating systems, file management, word processing, spreadsheet, database, Internet, and electronic mail is emphasized.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Metallurgy (422)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****422-100 Metallurgy****Credits:** 3

This course examines the nature, properties, and processing of metals. Subjects presented include history, occurrence, recovery from ores, manufacture, structure, heat treatment, theory of alloys, and basics of materials science. Steels, cast iron, and common non-ferrous metals receive the major emphasis.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**422-343 Welding Blueprint Reading 1****Credits:** 1

This course covers the fundamentals of Blueprint reading. Students examine and analyze types of drawings, orthographic projection, library of lines, title block dimensions and produce sketching projects.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**422-344 Welding Blueprint Reading 2****Credits:** 2

This course covers blueprint reading specific to the welding industry. Students examine and define welding symbols and abbreviations used on welding specific blueprints.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

## Millwright (423)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****423-510 Maintenance Mechanic/Millwright 1****Credits:** 2**Aid Code:** 50 - Apprentice.

Complete Course Listing

**423-511 Maintenance Mechanic/Millwright II****Credits:** 2

**Aid Code:** 50 - Apprentice.  
Complete Course Listing

**423-512 Maintenance Mechanic/Millwright III****Credits:** 2

**Aid Code:** 50 - Apprentice.  
Complete Course Listing

**423-513 Maintenance Mechanic/Millwright IV****Credits:** 2

**Aid Code:** 50 - Apprentice.  
Complete Course Listing

**423-514 Maintenance Mechanic/Millwright V****Credits:** 2

**Aid Code:** 50 - Apprentice.  
Complete Course Listing

**423-515 Maintenance Mechanic/Millwright VI****Credits:** 2

**Aid Code:** 50 - Apprentice.  
Complete Course Listing

**423-516 Maintenance Mechanic/Millwright VII****Credits:** 2

**Aid Code:** 50 - Apprentice.  
Complete Course Listing

**423-517 Maintenance Mechanic/Millwright VIII****Credits:** 2

**Aid Code:** 50 - Apprentice.  
Complete Course Listing

## Natural Science (806)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
Academic Programs (p. 22).

**806-108 Applied Anatomy and Physiology****Credits:** 5

This course builds on a basic knowledge of skeletal, muscle and nervous systems and presents an in-depth study of their structure and functions. The integration of these systems to produce motion is studied. Critical thinking skills are encouraged as to analyze the relationships of these systems to normal movement, posture and gait. The development of observation and palpation skills is emphasized. Independent study of the pathophysiology of the major body systems is also included.

**Aid Code:** 10 - Associate Degree.

**Restrictions:** Restricted to students admitted to Physical Therapist Assistant Program.

**Pre-requisites:** (806-154 or 806-139 or 806-140) and (806-177 or 806-131 or 806-195)

Complete Course Listing

**806-110 Forensic Science (Criminalistics)****Credits:** 3

Forensic Science is a course designed to provide students of law enforcement with an appreciation of the capabilities and limitations of scientific analysis of crime scene evidence. All functions of a basic crime lab are discussed with emphasis on relating methods of analysis to the proper collection and packaging of evidence. Laboratory exercises are designed to expand upon and reinforce lecture material.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or SAT Reading, 330 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-112 Principles of Sustainability****Credits:** 3

Prepares the student to develop sustainable literacy, analyze the interconnections among the physical and biological sciences and environmental systems, summarize the effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce the use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal and recycling in the U.S., and analyze approaches used by your community to promote and implement sustainability.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or AccuPlacer Reading Comp, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-118 Metal Science****Credits:** 3

This is a one-semester course in basic physics and metallurgy principles for the Technical College student. The course reviews accuracy and precision of measurements, introduces calculations with units and conversions within and between systems of measurements, formula rearranging, and applications in problem solving. Basic topics include properties of matter, metallurgy, material properties, material testing, force, motion (linear and circular), energy, power, and simple machines. The topics of heat, electricity, and magnetism are also introduced in the class. Emphasis is placed on the application of the laws and principles of physics to practical problems found in the machine shop and industry.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (804-308) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-134 General Chemistry****Credits:** 4

Covers the fundamentals of chemistry. Topics include the metric system, problem-solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water; acids, bases, and salts; and gas laws.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or ASSET Numerical Skills, 40 or Test Waived-College Degree or 804-107 or 804-117 or 804-123 or 804-133) or (AccuPlacer Arithmetic, 065 or (AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 030) and (COMPASS Reading Skills, 73 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree) or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-139 Survey Of Physics****Credits:** 3

This course emphasizes understanding basic physics concepts through laboratory investigation and applications. Topics include kinematics, dynamics, work, energy, power, temperature, heat, waves, electricity, magnetism, electromagnetic waves, optics, and atomic and nuclear physics.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-140 Physics****Credits:** 3

This course is designed to acquaint the students with basic concepts of physics and their applications. Topics covered include algebra (a review), measurement, motion, forces, work, energy, power, simple machines, heat, and electricity. Laboratory exercises are designed to expand upon and reinforce lecture material.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**806-152 Technical Science II****Credits:** 3

This course is a continuation of Technical Science I with a study of heat, wave motion and sound, light and optics, and an introduction to electricity and magnetism. Sufficient mathematical treatment is given to the materials so the student can apply the principles in a quantitative manner. The laboratory work includes computer-aided study and the appropriate experiments to illustrate the application of the physical principles.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 806 151

Complete Course Listing

**806-154 General Physics 1****Credits:** 4

Presents the applications and theory of basic physics principles. This course emphasizes problem-solving, laboratory investigation, and applications. Topics include unit conversion and analysis, vectors, translational and rotational kinematics, translational and rotational dynamics, heat and temperature, and harmonic motion and waves.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (804-114 or 804-115) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or SAT Reading, 330 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing

**806-172 Basic Nutritional Science****Credits:** 3

This course provides an introduction into the science of nutrition. Basics concepts related to digestion and metabolism are presented. The significance of carbohydrates, lipids, proteins and vitamins to the human organism are discussed. The relationship of proper nutrition to selected pathological conditions throughout the human lifecycle is presented. The concept of sustainability and environmentally - conscious food production introduced.

**Aid Code:** 10 - Associate Degree.  
Complete Course Listing

**806-175 General Pathophysiology****Credits:** 3

This introductory course in pathophysiology covers topics related to alterations of homeostasis and the associated pathophysiological processes. The major emphasis will be on the physiological factors that underlie disease states. Course studies include the processes involved that generate illness; signs and symptoms of commonly occurring illness states and effects of disease processes on the cell. Review of normal homeostatic mechanisms is included. Study of the fundamental processes in relation to the pathophysiological processes can enable the students to apply this knowledge to clinical situations.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (806-179) and (COMPASS Reading Skills, 73 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251)  
Complete Course Listing

**806-177 General Anatomy and Physiology****Credits:** 4

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision-making and professional communication with colleagues and patients.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and (Chemistry, 1.0 or 856-787 or 806-199 or 806-134)

Complete Course Listing

**806-179 Advanced Anatomy and Physiology****Credits:** 4

Advanced Anatomy and Physiology is the second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body systems approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery within a classroom and laboratory setting. Experimentation within a science lab will include analysis of cellular metabolism, the individual components of body systems such as the nervous, neuro-muscular, cardiovascular, and urinary. Continued examination of homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance and blood. Integration of genetics to human reproduction and development are also included in this course.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (806-195 or 806-177 or 806-177 or 806-131)  
Complete Course Listing



**806-186 Introduction to Biochemistry****Credits:** 4

Provides students with skills and knowledge of organic and biological chemistry necessary for application within Nursing and other Allied Health careers. Emphasis is placed on recognizing the structure, physical properties and chemical reactions of organic molecules, body fluids, and acids. Additional emphasis is placed on biological functions and their relationships to enzymes, proteins, lipids, carbohydrates and DNA.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (Chemistry, 1.0 or 856-787 or 856-787 or 806-134) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or SAT Reading, 330 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-139 or 806-154 or 806-177 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-189 Basic Anatomy****Credits:** 3

Examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**806-194 Survey of Anatomy and Physiology****Credits:** 3

This course is designed to provide a basic understanding of human anatomy, physiology, diseases, and terminology to assist with the transcription and coding of medical documents.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-197 Microbiology****Credits:** 4

This course examines microbial structure, metabolism, genetics, growth and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms and the medical impact of microbes in the environment, industry, and biotechnology are also addressed.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (806-177 or 806-195 or 806-196 or 806-179 or 806-199 or COMPASS Reading Skills, 73 or ACT Reading, 16 or SAT Reading, 330 or AccuPlacer Reading Comp, 76 or Next Gen AccuPlacer Reading, 251) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-199 General, Organic and Biological Chemistry****Credits:** 4

A one semester course covering the fundamental aspects of inorganic and organic chemistry. Topics include lab safety, measurement, elementary problem solving, atomic structure, periodicity, chemical bonding, types of chemical reactions, properties of water, acid, bases, and salts, types of solutions and calculations of concentrations, gas laws, oxidation-reduction concepts, ionization, pH and buffers, hydrocarbons, types of organic compounds and functional groups, biochemical compounds including lipids, carbohydrates, proteins, and nucleic acids.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-315 Applied Science****Credits:** 2

This one semester course in basic physics principles reviews accuracy and precision of measurements and introduces calculations with units and conversions within and between systems of measurements. Formula rearranging and applications to problem solving are reviewed. Basic physics topics such as properties of matter, mechanical principles of force, motion (linear and circular), energy, power and machines, heat, electricity, and magnetism are also studied. Emphasis is placed on the applications of the laws and principles of physics to practical problems. The use of vectors is demonstrated in forces, velocities, and electrical transformers.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (804-304 or 804-306)

Complete Course Listing



**806-333 Aviation Physics****Credits:** 2

This is a one-semester course in basic physics principles for aviation maintenance technicians. It includes a review of the units of measurement and conversions along with the properties of fluids. Mechanics (linear motion, equilibrium, energy, power, circular motion and machines), heat (temperature scales, specific heats and transfer), along with sound (wavelength, frequency, speed and intensity) are included. Special emphasis is given to problems applying these principles to the particular area of technology.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

## Numerical Control (444)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**444-100 Manual Milling 1****Credits:** 1

In this course students will explore the purpose and function of milling machines and their components. Students will practice simple mill operations such as squaring stock and basic drilling, as well as related skills such as maintenance, the use of cutting tools, and work holding. Students will also practice shop safety procedures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**444-101 Manual Milling 2****Credits:** 1

In this course students will identify and use tool holding and advanced workholding concepts. Students will also explore alignment concepts as they practice using vises and fixtures, as well as aligning machine axes and using part datums to accurately locate holes and other component fixtures.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-100)

Complete Course Listing

**444-102 Lathe - Manual Basic 1****Credits:** 1

In this course students will identify the purpose and function of manual lathe machines and their components. Students will practice and perform simple turn operations such as simple diameters and shoulder features. Students will also practice safety and maintenance procedures as they relate to manual lathes.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-101)

Complete Course Listing

**444-103 Lathe - Manual Basic 2****Credits:** 1

In this course students will identify and practice tool holding and advanced workholding techniques. Students will explore and apply alignment concepts related to tools, centers, and fixtures, as well as aligning machine axes and using part datums to accurately locate radial and axial and other component features.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-102)

Complete Course Listing

**444-104 Blueprint Reading 1****Credits:** 1

In this course students will identify the purpose and function of different types of technical drawings, as well as proper drawing structure and drawing terminology. Students will practice producing simple sketches and visualizing two and three-dimensional parts. Students will practice visualizing drawings and blueprints using the orthographic and isometric projections in first and third angle formats.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-103)

Complete Course Listing

**444-105 Blueprint Reading 2****Credits:** 1

In this course students will identify the purpose and function of advanced projection types, section views, coordinate systems, and other interpretations of information found on standard industrial blueprints.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-104)

Complete Course Listing

**444-106 Metrology - Basic****Credits:** 1

In this course students will explore metrology, the study of measurement. Students will identify and practice methods of inspecting parts for size and accuracy of features using an assortment of precision and semi-precision measuring instruments. Students will also practice instrument care, calibration, handling, and instrument reading.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-105)

Complete Course Listing

**444-107 Metrology - Table Techniques****Credits:** 1

In this course students will practice using advanced inspection instruments to carry out high precision inspection, including surface plates, blocks, pins, and dial indicators.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-106)

Complete Course Listing

**444-108 Layout & Benchwork****Credits:** 1

In this course students will practice layout techniques, hand tool usage, and benchwork using hand tools. Students will also practice using bandsaws, drill presses, and other power tools.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-107 or 422-116)

Complete Course Listing

**444-109 Secondary Operations - Drill Press****Credits:** 1

In this course students will practice advanced hand tool and manual power tool use and operation, including the use of a drill press for production, pedestal grinder for tool maintenance, and sanders for various operations.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-108)

Complete Course Listing

**444-110 CNC G-Code Programming 1****Credits:** 1

In this course students will use a computer to create basic G-code CNC programs. Students will practice using CNC program codes, words, and functions to create basic drilling programs for a CNC mill.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-109 or 420-135)

Complete Course Listing

**444-111 CNC G-Code Programming 2****Credits:** 1

In this course students will practice creating G-code CNC programs for lathe (turning) processes.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-110)

Complete Course Listing

**444-112 Lathe - Manual Intermediate****Credits:** 1

In this course students will practice and perform advanced machining operations using various materials and work holding devices. Students will practice precision boring operation, as well as precision hole and taper feature locating and machining.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-111)

Complete Course Listing

**444-113 Lathe - Manual Advanced****Credits:** 1

In this course students will practice and perform advanced machining, using a variety of materials and holding devices, emphasizing speed and accuracy. Student will practice using advanced lathe features and setups to machine complex multi-process (mill/turn) lathe parts.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-112)

Complete Course Listing

**444-114 Milling - Manual Intermediate****Credits:** 1

In this course students will practice and perform advanced machining operations using various materials and work holding devices. Students will practice precision boring operation, as well as precision hole and taper feature locating and machining.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-113)

Complete Course Listing

**444-115 Milling - Manual Advanced****Credits:** 1

In this course students will practice and perform advanced machining, using a variety of materials and holding devices, emphasizing speed and accuracy. Student will practice using radial axes and dividing heads for advanced machining of precision components.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-114)

Complete Course Listing

**444-116 CNC Mill Fundamentals****Credits:** 1

In this course students will practice basic mill operation, setup, and the fundamentals of manual programming for CNC mills.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-115 or 420-139)

Complete Course Listing

**444-117 CNC Lathe Fundamentals****Credits:** 1

In this course students will practice basic lathe operation, setup, and the fundamentals of manual programming for CNC lathes.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-116)

Complete Course Listing

**444-118 Surface Grinding Operations****Credits:** 1

In this course students will explore the use and purpose of grinding machines. Students will practice setting up and operating surface grinding machines to perform simple grinding operations to typical tolerances.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-117)

Complete Course Listing

**444-119 Introduction to Gears & Gear Cutting****Credits:** 1

In this course students will explore tools and techniques used in the process of gearmaking. Students will practice cutting standard spur gears.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-118 or 420-140)

Complete Course Listing

**444-120 Milling - Advanced Setups & Tooling****Credits:** 1

In this course students will practice selecting and applying work holding devices when operating a mill. Students will also practice gathering data using formulas and reference material to support machining operation.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-144)

Complete Course Listing

**444-121 Lathe - Advanced Setups & Tooling****Credits:** 1

In this course students will practice selecting and applying work holding devices when operating a lathe. Students will also practice gathering data using formulas and reference material to support machining operation.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-120)

Complete Course Listing

**444-122 CMM Concepts****Credits:** 1

In this course students will practice the use of a coordinate measuring machine. Students will identify their types and demonstrate their care, limits, setup, and applications.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-145)

Complete Course Listing

**444-123 Advanced Metrology Concepts****Credits:** 1

In this course students will demonstrate the use of advanced measuring tools including hand tools and electronic devices. Students will practice proper setup of piece to measure and proper documentation of results.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-122)

Complete Course Listing

**444-124 Basic CAD - Solidworks and AutoCAD****Credits:** 1

In this course students will demonstrate the use of CAD software to create blueprints for the manufacturing sector. SolidWorks and AutoCad will be used.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-123)

Complete Course Listing

**444-125 Intermediate CAD - Solidworks and AutoCAD****Credits:** 1

In this course students will demonstrate the use of CAD software to create complex blueprints for the manufacturing sector. SolidWorks and AutoCAD will be used.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-124)

Complete Course Listing

**444-126 CNC Turning Operations 1****Credits:** 1

In this course students will demonstrate machine familiarization, machine start-up procedures, program transfers, work holder preparation, tooling installation, setting tooling offsets, and establishing a part origin on a CNC Lathe.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-125 or 606-175)

Complete Course Listing

**444-127 CNC Turning Operations 2****Credits:** 1

In this course students will demonstrate how to safely run the first part and make minor adjustments to create quality parts on a CNC Lathe.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-126)

Complete Course Listing

**444-128 CNC Turning Operations & Programming 1****Credits:** 1

In this course students will demonstrate writing a simple program using correct structure and style. Students will start using the basic "G" codes necessary for program basic turned part features such as, faces, outside diameters, and holes on a CNC Lathe.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-127)

Complete Course Listing

**444-129 CNC Turning Operations & Programming 2****Credits:** 1

In this course students will practice writing and editing simple programs in order to create common part features. Students will develop more advanced programs that are efficient, effective, and clearly written for the CNC Lathe.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-128)

Complete Course Listing

**444-130 CNC Milling Operations 1****Credits:** 1

In this course students will demonstrate machine familiarization, machine start-up procedures, program transfers, work holder preparation, tooling installation, setting tooling offsets, and establishing a part origin on a CNC Mill.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-129)

Complete Course Listing

**444-131 CNC Milling Operations 2****Credits:** 1

In this course students will demonstrate how to safely run the first part and make minor adjustments to create quality parts on a CNC Mill.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-130)

Complete Course Listing

**444-132 CNC Milling Operations & Programming 1****Credits:** 1

In this course students will demonstrate writing a simple program using correct structure and style. Students will start using the basic "G" codes necessary for program basic turned part features such as, faces, outside diameters, and holes on a CNC Mill.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-131)

Complete Course Listing

**444-133 CNC Milling Operations & Programming 2****Credits:** 1

In this course students will practice writing and editing simple programs in order to create common part features. Students will develop more advanced programs that are efficient, effective, and clearly written for the CNC Mill.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-132)

Complete Course Listing

**444-134 CNC Milling Operations & Programming 3****Credits:** 1

In this course students will practice writing more complex features utilizing more advanced programming methods. The learner will program and machine rectangular/circular pockets.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-133)

Complete Course Listing

**444-135 CNC Milling Operations & Programming 4****Credits:** 1

In this course students will demonstrate writing more complex features utilizing more advanced programming methods. The learner will program and machine internal and external threads, and will use cutter compensation.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-134)

Complete Course Listing

**444-136 CNC Milling Problem Solving 1****Credits:** 1

In this course students will practice solving basic CNC milling problems. They will use multiple work offsets, loops, subprograms, and use variables in programs to shorten and simplify programs.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-135)

Complete Course Listing

**444-137 CNC Milling Problem Solving 2****Credits:** 1

In this course students will practice solving complicated CNC milling problems utilizing tools and methods from previous courses.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-136)

Complete Course Listing

**444-138 CNC Turning Problem Solving 1****Credits:** 1

In this course students will demonstrate solving basic CNC Lathe problems. Students will practice using loops, subprograms, and variables in programs to shorten and simplify programs.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-137)

Complete Course Listing

**444-139 CNC Turning Problem Solving 2****Credits:** 1

In this course students will practice solving complicated CNC lathe problems utilizing tools and methods from previous courses.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-138)

Complete Course Listing

**444-140 Basic CAM - MasterCAM****Credits:** 1

In this course students will demonstrate the use of CAM software for creating CNC machine programs. MasterCam will be used.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-139)

Complete Course Listing

**444-141 Intermediate CAM - MasterCAM****Credits:** 1

In this course students will demonstrate the use of CAM software to create more complex programs for CNC machines. MasterCam will be used.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-140)

Complete Course Listing

**444-142 CNC Internship****Credits:** 1

In this course students will demonstrate the use of all the tools they have learned in the program to complete an internship at a local business, or complete the internship at the college.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-141)

Complete Course Listing

**444-143 CNC Capstone****Credits:** 1

In this course students will demonstrate the use of all the tools they have learned in the program to complete an all exclusive project.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-142)

Complete Course Listing

**444-144 GD&T Interpretations****Credits:** 1

In this course students will practice the use of Geometric Dimensioning and Tolerancing as it pertains to mechanical specifications and relationships in technical drawings. Students will practice interpretation of these symbols, as well as basic inspection methodologies.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-119)

Complete Course Listing

**444-145 Manufacturing Support Systems****Credits:** 1

In this course students will explore part production and sequencing planning in manufacturing facilities. Students will identify the impact that sudden changes, such as scrapping and reworking, can have on these processes.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (444-121 or 420-142)

Complete Course Listing

**444-150****Credits:** 3

Students engage in basic physics and metallurgy principles, applied to the manufacturing setting. Students review accuracy and precision of measurements, introduces calculations with units and conversions within and between systems of measurements, formula rearranging, and applications in problem solving. Emphasis is placed on the application of the laws and principles of physics to practical problems found in the machine shop and industry.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**444-300 Shop Computing****Credits:** 2

The ability to use a computer has become one of the most basic skills. In this course the learner will learn to use a computer to navigate through the learning process as well as being able to use the computer to operate an assortment of software. Students learn how to operate the computer's operating system to perform many common tasks such as opening, closing, saving, and printing files. They will practice these operating system functions on files created from software used in the machine shop.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-301 Metrology****Credits:** 2

Metrology is the study of measurement. The production of quality parts is impossible without adequate measurement. Therefore, this is a course that should be taken before any machining course. You will learn about an assortment of precision and semi-precision measuring instruments used for the job shop or where large numbers of parts are produced. Material will cover instrument care, types, components, scales, calibration, handling, and reading the instrument. You will have an opportunity to use and gain proficiency in most of the measuring instruments that are discussed.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-302 Semi-Precision Machining****Credits:** 2

This course is designed to acquaint the student with the semi-precision/fabrication machines in the machine shop. These machines are easier to operate and provide a good starting point for the beginner. These machines should not be considered to be less important in the machine shop or to require less skill to operate. These drill presses, pedestal grinders, bench tools, and saws are extremely important tools. The associated work holding, cutting tools, processes, and measuring instruments are also taught.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-303 Turning Fundamentals****Credits:** 2

This module covers the introduction to the engine lathe. Emphasis is on knowing the machine parts, their function, and performing simple lathe operations. Engine lathes are one of the basic machines with the ability to produce cylindrical parts to close tolerances. Introductory subjects such as related safety, maintenance, metal cutting theory, cutting tools, and work holding for lathes will be taught. There is an emphasis on safety. All of these subjects will be introduced and built upon as the learner progresses to higher levels of proficiency.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-304 Geometric Dimensioning and Tolerancing (GD&T) Interpretations****Credits:** 1

Geometric Dimensioning and Tolerancing is a system of symbols used to portray mechanical specifications and relationships on mechanical drawings. Industries using this system include large automotive, aircraft, and agricultural manufacturers, a growing number of smaller industries and most European manufacturers. Students will explore ANSI (American National Standard Institute) Standard symbols and methods of interpretation of these symbols to meet the expectations of the mechanical design engineer that specified them on the drawing.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-305 Milling Fundamentals****Credits:** 2

This module covers the introduction to the milling machines. Emphasis is on knowing the machine parts, their function, and performing simple lathe operations. Introductory subjects such as related safety, maintenance, metal cutting theory, cutting tools, and work holding for the mill will be taught. There is an emphasis on safety. All of these subjects will be introduced and built upon as the learner progresses to higher levels of proficiency.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-306 Turning Applications****Credits:** 2

This advanced turning course involves performing more difficult machining operations, using different materials, and using different work holding devices. The material, work holding devices and setups will present the learner with challenging situations that require them to apply their past experiences along with what they have learned in theory to produce quality parts. In situations where the student is performing previously learned operations, the learner will be expected to develop their speed and accuracy. One of the requirements of an advanced course is that students apply their knowledge to problems through the trouble shooting process.

**Aid Code:** 32 - Two-year Technical Diploma.[Complete Course Listing](#)**444-307 Manufacturing Support Systems****Credits:** 1

Producing machined parts routinely requires that components be cut on different machines in a specified sequence. While dozens to thousands of different parts may be at various stages of completion at any given instant within a manufacturing facility, it is necessary that these parts be sequenced properly and progress tracked so product can be shipped to the customer when expected. Students will be exposed to this environment and will learn to understand how sudden changes (scrap/rework) influence this critical manufacturing function.

**Aid Code:** 32 - Two-year Technical Diploma.[Complete Course Listing](#)**444-308 Milling Applications****Credits:** 2

The advanced milling course involves performing more difficult machining operations, using different materials, and using different work holding devices. The materials, work holding devices and setups will present the learner with challenging situations that require them to apply their past experiences along with what they have learned in theory to produce quality parts. In situations where the student is performing previously learned operations, the learner will be expected to develop their speed and accuracy. One of the requirements of an advanced course is that students apply their knowledge to problems through the trouble shooting process.

**Aid Code:** 32 - Two-year Technical Diploma.[Complete Course Listing](#)**444-309 Computer Numerical Control (CNC) Fundamentals****Credits:** 2

This class is geared for the beginner or the person wishing to brush up on the fundamentals. It will focus on NC terminology, basic machine operation, setup, and the fundamentals of manual programming for CNC lathes and mills. Participants will learn about rectangular systems, the word address programming format, and absolute/incremental tool positioning.

**Aid Code:** 32 - Two-year Technical Diploma.[Complete Course Listing](#)**444-310 Grinding and Gear Techniques****Credits:** 2

The grinding portion of this course will start you out at the beginning with grinding terminology, machine types, control names and functions, and processes. The related grinding information grinding theory, tooling, safety, and work holding will be taught. This course will result in the learner being able to setup and operate a surface grinding machine to perform simple grinding operation to typical grinding tolerances. The purpose of the gear cutting activity is to introduce the student to the terminology, math, tools, and techniques for cutting gears. Gear cutting besides being a specialized machining operation is an occupational discipline in itself. That is, students may find they would like to cut gears as a career. It is a highly specialized process so it is only possible for a student to get an introduction. This introduction should prepare the student adequately for a job entry level position.

**Aid Code:** 32 - Two-year Technical Diploma.[Complete Course Listing](#)**444-311 Computer Numerical Control (CNC) Turning Operations****Credits:** 2

CNC turning centers produce many of the cylindrical shapes machined in production machine shops today. This course is the introductory course for CNC Turning Centers and includes machine/control familiarization, machine startup procedures, program transfers, work holder preparation, tooling installation, setting tooling offsets, and establishing a part origin. In addition, students learn how to safely run the first part and make minor adjustments to create quality parts.

**Aid Code:** 32 - Two-year Technical Diploma.[Complete Course Listing](#)**444-312 Computer Numerical Control (CNC) Turning - Operations and Programming 1****Credits:** 2

This course introduces the student to the programming process for CNC Turning Centers. The student will learn to create very simple programs and to run them on the machine. Students will learn about program structure and style. Students will start using the basic "G" codes necessary for program basic turned part features such as, faces, outside diameters, and holes. They will write/edit simple programs in order to create these common part features. The goal will be to start out simple and move to programs that are efficient, effective, and clearly written.

**Aid Code:** 32 - Two-year Technical Diploma.[Complete Course Listing](#)



**444-313 Tooling and Workholding****Credits: 2**

This module consists of competencies relating to work holding devices and methods. Students will learn about the basic work holding principles, work holding devices, and work holding methods. These topics will be discussed in depth so that the student will be able to select and apply the best work holding device for the situation. Advanced knowledge of work holding will promote safety, setup speed, and cutter/work rigidity. Cutting tool information is vital for an in-depth and complete understanding of the machining processes. The selection of cutting tools and cutting tool data may be one of the most complex areas of study. Students will learn to select tools based on part geometry and machining operation. The learner will acquire the cutting data from formulas along with using reference material to obtain the data. This is very important because one of the most common complaints from employers is that employees cannot set machine feeds and speeds resulting in either wasted time or damaged tooling. As the student becomes more proficient, they will gain the ability to troubleshoot machining problems that are related to cutting tools.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-314 Coordinate Measuring Machines (CMM) Techniques****Credits: 2**

In this course you will learn about Coordinate Measuring Machines (CMM). You will learn about their types, care, limits, setup, and applications. The CMM is a high tech solution to many measuring situations with (as with all measuring instruments) limitations. Often it is as important to know when not to use a particular instrument as when to use it. Proper use of the CMM will result in good and consistent measurements. Students will be able to setup and measure parts.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-315 Computer Numerical Control (CNC) Milling- Operations****Credits: 2**

CNC mills produce many of the prismatic shapes machined in production machine shops today. This course is the introductory course for CNC Machining Centers and includes machine/control familiarization, machine startup procedures, program transfers, work holding preparation, tooling installation, setting tooling offsets, and the part origin. In addition, students will learn how to safely run the first part and make minor tool offset adjustments to produce quality parts.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-316 Computer Numerical Control (CNC) Milling-Operations and Programming 1****Credits: 2**

This course introduces the student to the programming process for CNC Machining Centers. The student will learn to create very simple programs and to run them on the machine. Students will learn about program structure and style. Students will start using the basic "G" codes necessary for program basic milled part features such as, faces, steps, slots, holes, improved holes, and circular contours. They will write/edit simple programs in order to create these common part features. The goal will be to start out simple and move to programs that are efficient, effective, and clearly written.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-318 Computer Numerical Control (CNC) Milling-Operations and Programming 2****Credits: 2**

Students will learn to program and machine more complex features using more advanced programming methods. The learner will program and machine rectangular/circular pockets, mill internal threads, and will use cutter compensation.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-319 Computer Numerical Control (CNC) Turning-Operations and Programming 2****Credits: 2**

Students will learn to program and machine more complex features. The learner will program and machine taper, radii, threads, use cutter compensation, and live tooling.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-320 Computer Numerical Control (CNC) Milling-Operations and Programming 3****Credits: 2**

Students will learn the advantages of several advanced programming techniques. They will learn to use multiple work offsets, loops, subprograms, and use variables in programs to shorten and simplify programs. All these programming techniques will be performed on 3 axis and 4 axis machining centers. Students will also learn advanced techniques for making programs run more efficiently.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-321 Basic Computer Aided Design (CAD) / Computer Assisted Manufacturing (CAM)****Credits:** 2

Computer Aided Design (CAD) and Computer Assisted Manufacturing (CAM) have become standard tools used almost wherever CNC machines make parts. Students will use the Virtual Gibbs software to create geometry, setup tools, and produce machining operations. The learner will create machining operations for typical milled/turned part features such as faces, diameters, steps, slots, contours, holes, etc. Students will then post-process their CAD/CAM files to generate the CNC programs for specific CNC machines.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**444-324 Intermediate Computer Aided Design (CAD) / Computer Assisted Manufacturing (CAM)****Credits:** 2

Using Virtual Gibbs, students will learn to create machining operations for additional milled/turned part features. They will create machining operations for threading, pockets, bored holes, and text. The student will then learn to create simple 3-D shapes (solids) and create the machining operations necessary to machine them. Once the file has been created and post processed, the student will run the part on a CNC machine.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

## Nursing (543)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**543-101****Credits:** 2

This course focuses on basic nursing concepts that the beginning nurse will need to provide care to diverse patient populations across the lifespan. Current and historical issues impacting nursing will be explored within the scope of nursing practice. The nursing process will be introduced as a framework for organizing the care of patients with alterations in cognition, elimination, comfort, grief/loss, mobility, integument, and fluid/electrolyte balance.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Nursing Program.**Pre-requisites:** (806-177 or 806-195 or 806-131) and (801-195 or 801-136)**Co-requisites:** (809-188 or 809-120)

Complete Course Listing

**543-102****Credits:** 3

This course focuses on development of clinical skills and physical assessment across the lifespan. Content includes mathematic calculations and conversions related to clinical skills, blood pressure assessment, aseptic technique, wound care, oxygen administration, tracheostomy care, suctioning, management of enteral tubes, basic medication administration, glucose testing, enemas, ostomy care, and catheterization. In addition the course includes techniques related to obtaining a health history and basic physical assessment skills using a body systems approach.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Nursing Program.**Pre-requisites:** (806-177 or 806-195 or 806-131) and (801-195 or 801-136)**Co-requisites:** (809-188 or 809-120)

Complete Course Listing

**543-103****Credits:** 2

This course introduces the principles of pharmacology, including drug classifications and their effects on the body. Emphasis is on the use of the components of the nursing process when administering medications.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Nursing Program.**Pre-requisites:** (806-177 or 806-195 or 806-131) and (801-195 or 801-136)**Co-requisites:** (809-188 or 809-120)

Complete Course Listing

**543-104****Credits:** 2

This introductory clinical course emphasizes basic nursing skills and application of the nursing process in meeting the needs of diverse clients. Emphasis is placed on performing basic nursing skills, the formation of nurse-client relationships, communication, data collection, documentation, and medication administration.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Nursing Program.**Pre-requisites:** (806-177 or 806-195 or 806-131) and (801-195 or 801-136)**Co-requisites:** (809-188 or 809-120)

Complete Course Listing

**543-105****Credits:** 3

This course elaborates upon the basic concepts of health and illness as presented in Nursing Fundamentals. It applies theories of nursing in the care of clients through the lifespan, utilizing problem solving and critical thinking. This course will provide an opportunity to study conditions affecting different body systems and apply therapeutic nursing interventions. It will also introduce concepts of leadership, team building, and scope of practice.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (543-101) and (543-102) and (543-103) and (543-104)**Co-requisites:** (806-179) and (801-196)

Complete Course Listing

**543-106****Credits:** 3

This course will cover topics related to health promotion in the context of the family. It will cover nursing care of the developing family, which includes reproductive issues, pregnancy, labor and delivery, post-partum, the newborn, and the child. Recognizing the spectrum of healthy families it will discern patterns associated with adaptive and maladaptive behaviors applying mental health principles. An emphasis is placed on teaching and supporting healthy lifestyle choices. Nutrition, exercise, stress management, empowerment, and risk reduction practices are highlighted. Study of the family will cover dynamics, functions, discipline styles, and stages of development.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (543-101) and (543-102) and (543-103) and (543-104)**Co-requisites:** (806-179) and (801-196)

Complete Course Listing

**543-107****Credits:** 2

This clinical experience applies nursing concepts and therapeutic interventions to clients across the lifespan. It also provides an introduction to concepts of teaching and learning. Extending care to include the family is emphasized.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (543-101) and (543-102) and (543-103) and (543-104)**Co-requisites:** (806-179) and (801-196)

Complete Course Listing

**543-108****Credits:** 2

This clinical experience applies nursing concepts and therapeutic nursing interventions to groups of clients. It also provides an introduction to leadership, management, and team building.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (543-101) and (543-102) and (543-103) and (543-104)**Co-requisites:** (806-179) and (801-196)

Complete Course Listing

**543-109****Credits:** 3

Complex Health Alterations I prepares the learner to expand knowledge from previous courses in caring for clients across the life span with alterations in cardiovascular, respiratory, endocrine, and hematologic systems as well as clients with fluid/electrolyte and acid-base imbalance, and alterations in comfort.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (543-105) and (543-106) and (543-107) and (543-108)**Co-requisites:** (806-197) and (809-198)

Complete Course Listing

**543-110****Credits:** 2

This course will cover topics related to the delivery of community and mental health care. Specific health needs of individuals, families, and groups will be addressed. Attention will be given to diverse and at-risk populations. Mental health concepts will concentrate on adaptive/maladaptive behaviors and specific mental health disorders. Community resources will be examined in relation to specific types of support offered to racial, ethnic, economically diverse individuals and groups.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (543-105) and (543-106) and (543-107) and (543-108)**Co-requisites:** (806-197) and (809-198)

Complete Course Listing

**543-111****Credits:** 3

This intermediate level clinical course develops the RN role when working with clients with complex health care needs. A focus of the course is developing skills needed for managing multiple clients across the lifespan and priorities. Using the nursing process, students will gain experience in adapting nursing practice to meet the needs of clients with diverse needs and backgrounds.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (543-105) and (543-106) and (543-107) and (543-108)**Co-requisites:** (806-197) and (809-198)

Complete Course Listing

**543-112****Credits:** 1

This course focuses on the development of advanced clinical skills. Content includes advanced IV skills, blood product administration, chest tube systems, basic EKG interpretation and nasogastric/feeding tube insertion.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (543-105) and (543-106) and (543-107) and (543-108)**Co-requisites:** (806-197) and (809-198)

Complete Course Listing

**543-113****Credits:** 3

Complex Health Alterations II prepares the learner to expand knowledge and skills from previous courses in caring for clients with alterations in the immune, neuro-sensory, musculoskeletal, gastrointestinal, hepatobiliary, renal/urinary and the reproductive systems. The learner will also focus on management of care for clients with high-risk perinatal conditions, high-risk newborns and the ill child. Synthesis and application of previously learned concepts will be evident in the management of clients with critical/life threatening situations.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (543-109) and (543-110) and (543-111) and (543-112)**Co-requisites:** (809-196)

Complete Course Listing

**543-114****Credits:** 2

This course covers nursing management and professional issues related to the role of the RN. Emphasis is placed on preparing for the RN practice.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (543-109) and (543-110) and (543-111) and (543-112)

**Co-requisites:** (809-196)

Complete Course Listing

**543-115****Credits:** 3

This advanced clinical course requires the student to integrate concepts from all previous courses in the management of groups of clients facing complex health alterations. Students will have the opportunity to further develop critical thinking skills using the nursing process in making clinical decisions. Continuity of care through interdisciplinary collaboration is emphasized.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (543-109) and (543-110) and (543-111) and (543-112)

**Co-requisites:** (809-196)

Complete Course Listing

**543-116****Credits:** 2

This clinical experience prepares the student to assume the role of graduate nurse. The course promotes clinical decision-making, delegation, and collaboration to achieve client and organizational outcomes. Continued professional development is fostered.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (543-109) and (543-110) and (543-111) and (543-112)

**Co-requisites:** (809-196)

Complete Course Listing

**543-300 Nursing Assistant****Credits:** 3

This is a basic 120 hour Nursing Assistant course. Students who successfully complete this course will be eligible to take the competency evaluation for inclusion on the Wisconsin Nurse Aide Registry as a Nursing Assistant/Home Health Aide. The Nursing Assistant works under the supervision of an RN or LPN performing bedside and personal care, gathering data such as vital signs or in-take and out-put, and performing basic therapeutic interventions such as range of motion exercises. The course includes theory lecture, skills lab practice, and a clinical experience in a long-term care setting.

**Aid Code:** 30 - Short-term.

**Pre-requisites:** (Background Check, P) and (Health Forms Complete, P) and (COMPASS Pre-Algebra Skills, 025 or ACT Math, 14 or Pre ACT Math, 14 or TABE 10 D Math Composite, 551 or ASSET Numerical Skills, 35 or AccuPlacer Arithmetic, 040 or TABE Math, 080 or Next Gen AccuPlacer Arithmetic, 232 or SAT Mathematics, 300 or Test Waived-College Degree or 854-765 or 834-109) and (COMPASS Reading Skills, 062 or ACT Reading, 13 or Pre ACT Reading, 13 or TABE 10 D Reading, 561 or AccuPlacer Reading Comp, 055 or ASSET Reading Skills, 31 or Next Gen AccuPlacer Reading, 209 or SAT Reading, 240 or Test Waived-College Degree or TABE Reading, 080 or 858-790 or 838-104)

Complete Course Listing

**543-302A Nursing Assistant - Advanced****Credits:** 2

This is a 72 hour course that builds on the knowledge and skills of Nursing Assistant course and prepares a student to function in an Acute Care (Hospital) setting. Skills such as blood glucose values, pre and post-op patient care, assisting with sterile procedures and, blood pressure monitoring are learned. Students also receive a certification in advanced dementia care. The course combines theory lecture, skills lab demonstrations and a clinical experience in acute care. Evaluation of student performance includes a written exam, return demonstrations, clinical performance, a research paper and an oral presentation. Current American Heart Association Healthcare Provider CPR Certification is required for entry into this course.

**Aid Code:** 31 - One-year Technical Diploma.

**Pre-requisites:** (Background Check, P) and (Health Forms Complete, P) and (CPR for Health Students, P)

**Co-requisites:** (543-300)

Complete Course Listing

**543-309 Working w/Special Populations - Nsg Assist****Credits:** 1

This one credit course is intended to give a HealthCare student the opportunity to explore working with persons with Developmental Disabilities(DD). The course will include learning about several selected, commonly occurring DD types and what medical conditions are more likely to affect each population as well as techniques for successfully working with this population. The externship component will include following one DD person including time at their place of residence/group home as well as time at their place of employment (i.e. KANDU).

**Aid Code:** 30 - Short-term.

**Pre-requisites:** 543-302A

Complete Course Listing

**543-311 Personal Care Worker****Credits:** 1

This course develops the learner's professional skills as a personal assistant, direct support professional and personal care aide. Learners will gain knowledge/skills in communication, nutrition and eating assistance, health care safety and basic hands-on caregiving. The curriculum will include textbook readings, workbook assignments, reviews of supporting material and weekly lab activities. The learner will demonstrate competency in a final written exam and selected client-care skills.

**Aid Code:** 30 - Short-term.

Complete Course Listing

## Office Technology (106)

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Information provided includes course descriptions by subject only.

For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**106-103 Medical Transcription****Credits:** 4

This course provides the student with instruction using audio equipment and medically oriented materials. Emphasis is placed on developing the ability to use references to produce accurate, correctly formatted medical reports in an efficient manner, using correct spelling, punctuation, proofreading, and grammar. Medical report style and format are reviewed. The student will produce various medical and surgical reports representative of those typed in hospitals and clinics using a word processing program. Touch keyboarding with an accurate speed level of 40 wpm or more, basic computer, and advanced word processing skills are needed. Students should also have a strong background in grammar, punctuation, medical terminology, and medical document formatting.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (160-105 or 106-105) and (106-118) and (Typing Score, 040)

Complete Course Listing

**106-105 Medical Editing and the Electronic Medical Record****Credits:** 3

The emphasis of this course is on the creation and editing of medically oriented documents. The AHDI Book of Style will be used during a module that will include an introduction to transcription. Analysis and summarization of medical records will be covered. Students will edit speech recognition files and learn to take meeting minutes through role playing scenarios.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-120 or 501-101) and (106-127) and (106-185) and (806-194 or 806-177)

Complete Course Listing

**106-107 Computerized Patient Billing****Credits:** 3

This course emphasizes computerized patient billing procedures in the medical office environment. The students will input patient information, charges, payments, and appointments. In addition, reports and insurance forms are generated using a microcomputer-billing program. Confidentiality, claims adjudication, HIPAA, and compliance issues will be discussed.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 106-113

Complete Course Listing

**106-109 Medical Office Administration****Credits:** 3

In this capstone class students demonstrate their knowledge of all skills learned in the Medical Administrative Specialist program through simulation, discussion, research, and teamwork. Units of instruction will also include career development and professionalism in the health care setting.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-118) and (106-120 or 501-101) and (806-194 or 806-177 or 806-195)

Complete Course Listing

**106-110 Legal Office Professionalism****Credits:** 3

This course is a review of business English including spelling, capitalization, number usage, punctuation, word division, possessives, editing, and proofreading skills. Composition at the computer is also a part of this class. Specific legal office communication examples will be used. The course includes work on job finding skills, also. Resume writing, cover letter writing, and interviewing skills are included. A unit on using mail, the telephone, and e-mail in a legal office will be included as well as units on professional dress and ethics.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 106 180

Complete Course Listing

**106-113 Health Insurance****Credits:** 3

The student will gain knowledge and practical skill development in the health care insurance area. An introduction to insurance including understanding private and governmental providers; specific insurance terminology and their meaning; understanding the role of medical coding; privacy and HIPAA; and effectively using technology and resources for problem solving. The student will also be able to better understand his/her personal insurance coverage and some basic coding will be covered.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or 838-104) and (COMPASS Writing Skills, 070 or ACT English, 18 or ASSET Writing Skills, 44 or AccuPlacer Sentence Skills, 083 or Test Waived-College Degree or 831-103 or 801-195 or 801-136)

Complete Course Listing

**106-114 Healthcare Records Management****Credits:** 3

This course covers the systematic control of information in each phase of the record life cycle: creation, distribution, use, maintenance, and disposition. Topics will include systems of filing and storage (general and medical specific); organizing, managing, and controlling the system; potential careers; and trends in technology. Ethical/legal issues in the healthcare field will be addressed. Information on the EHR/EMR (electronic health record/electronic medical record) will also be covered. Simulations will provide hands-on experience with major filing classification systems in both paper and computer database (EHR) formats. Touch keyboarding and basic computers skills are necessary for this course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-127)

Complete Course Listing



**106-116 Customer Service Essentials****Credits:** 3

This course is intended to teach students to identify internal/external customers, develop verbal, nonverbal, and listening communication skills, develop problem-solving techniques, and ways of adding value to a customer interaction. Additionally, students will examine how technology and social media impacts customer service, examine the impact of service breakdowns, and examine campaigns for customer loyalty. Students will develop the ability to lead and expand the customer service process, learn techniques for dealing with unhappy customers, and build skills for analyzing and prioritizing customer needs. The course will utilize MS Outlook as a business communication tool.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-118 Pharmacology for Medical Administrative Specialist****Credits:** 2

Pharmacology for MAS (Medical Administrative Specialists) will provide an introduction to the use of pharmacology terminology and context. Included is information on medication actions, dosage forms, routes of administration, and drug uses. Students will research and create presentations on the pathophysiology of the human body in conjunction with treatments used to combat various diseases and conditions. Emphasis is on the terminology necessary for medical reports used in transcription and coding.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (103-106) and (106-120 or 501-101) and (806-194 or 806-177)

Complete Course Listing

**106-120 Medical Terminology for MAS****Credits:** 3

This course provides a combination of the study of medical vocabulary and the application of that vocabulary in an office setting. Students will learn the pronunciation, spelling, definition, and correct usage of medical terms used in a variety of healthcare office applications, with an emphasis on terminology necessary for medical reports used in transcription and coding. Students will also learn how to divide medical words into their component parts: the root word, the suffix, the prefix, and the combining form.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Writing Skills, 44 or COMPASS Writing Skills, 070 or ACT English, 18 or AccuPlacer Sentence Skills, 083 or Test Waived-College Degree or 801-195 and (COMPASS Reading Skills, 073 or 801-136) or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**106-124 Supervised Occupational Experience-Medical Office****Credits:** 1

In this course, students apply and interview for medical office internship placements. Once selected, the student will apply the knowledge and skills obtained in the classroom to work environment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-114 or 160-114) and (106-136 or 160-136) and (160-185) and (530-102 or 530-150)

Complete Course Listing

**106-127 Administrative Office Communications****Credits:** 3

Students will develop proofreading skills for identifying and correcting punctuation, grammar, spelling, and usage errors. This course also includes editing skills for improving format, consistency, clarity, conciseness, and completeness by incorporating the study of Business English. Activities require applying proofreading and editing skills to realistic business communications in both print and electronic formats. Touch keyboarding and basic word processing skills are helpful.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree) and (COMPASS Writing Skills, 070 or ACT English, 18 or ASSET Writing Skills, 44 or AccuPlacer Sentence Skills, 083 or Test Waived-College Degree) and (838-104 or 831-103 or 801-195 or 801-136)

Complete Course Listing

**106-132 Legal Transcription****Credits:** 3

Instruction is given on the use of transcription with emphasis on the production of legal transcription. The goal in this class is the production of error free documents with periodic spelling checks. There is added emphasis on the improvement of the use of legal terminology, English, proofreading, and listening skills.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-133) and (106-152)

Complete Course Listing

**106-133 Business Writing and Document Formatting****Credits:** 3

Document Formatting further develops keyboarding skills and emphasizes the efficient production of correctly formatted professional business documents. Additionally, the class will focus on applying correct grammar/spelling/punctuation/word usage to business communications and the use of appropriate communication style. The ability to use word processing software is expected at the beginning of the course along with touch keyboarding skill (a minimum of 45 wpm for 5 minutes with 5 or fewer uncorrected errors).

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 106-146

Complete Course Listing



**106-134 Legal Research and Writing****Credits:** 3

This course covers citing federal and state cases, statutes, legislative history materials, treatises, law reviews, as well as some additional secondary sources. Finding materials from citations is included. The basics of computerized legal research and writing, along with the preparation of legal documents, are stressed.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 106-152

Complete Course Listing

**106-136 Patient Billing and Reimbursement****Credits:** 4

This course emphasizes computerized patient billing procedures in the health-care environment utilizing practice management software and electronic health records. Reports and insurance forms are generated using microcomputer billing software for physician and hospital billing. The students will input patient information, charges, payments and appointments. Included in patient billing is the understanding of various collection practices, compliance, coding and linkage, and hospital billing. Correct use of telephone skills and being sensitive to confidentiality will be covered. Students will continue to build upon previous medical insurance and patient billing classes by reviewing in depth various medical insurance providers and completing proper documentation for billing.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-113) and (106-120 or 501-101)

Complete Course Listing

**106-138 Introduction to Law and Legal Terminology****Credits:** 3

This course will familiarize students with the fundamental principles and procedures of the legal system and introduce them to legal terminology. The goal of the course is to prepare students with basic legal knowledge to progress to more advanced legal courses.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-139 Records Management for Law Offices****Credits:** 3

This course will familiarize students with the fundamental principles and procedures of managing records in a legal environment. Students will work on their English and proofreading skills with paper and electronic records. Students will be introduced to records management systems related to the office environment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-138) and (106-181)

Complete Course Listing

**106-140 Keyboarding****Credits:** 1

Students will master the computer keyboard by touch including the letters and numeric keypad. Computer software is used to begin development of acceptable speed and accuracy levels.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-141 Legal Document Processing****Credits:** 3

During the first half of this course, students will learn WordPerfect. During the second half of this course, students will learn how to read, understand, and keyboard legal documents. They will acquire experience in formatting and creating a variety of documents, printed forms, and court papers. Proofreading habits will be refined.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-133) and (106-180 or 106-140)

Complete Course Listing

**106-142 Customer Service Essentials****Credits:** 1

This course is intended to teach students to identify internal/external customers, develop verbal, nonverbal, and listening communication skills, develop problem-solving techniques, and ways of adding value to a customer interaction. Students will develop the ability to lead and expand the customer service process, learn techniques for dealing with unhappy customers, and build skills for analyzing and prioritizing customer needs. The course will utilize MS Outlook as a business communication tool.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (103-128 or 103-106) and (106-127)

Complete Course Listing

**106-143 Skillbuilding****Credits:** 1

This course focuses on the development of keyboarding speed and accuracy. Diagnostic computer software allows students to determine their own particular weaknesses and error patterns and then select drills specifically designed to correct those weaknesses. The grading structure in this course is based on individual student speed/accuracy levels upon entering the course. A minimum touch (no finger or key watching) typing speed of 20 wpm/5 min is required for entry into the course. Students who are not touch typists should first enroll in 106-140 Keyboarding.

This course is a requirement for the Administrative Professional, Legal Administrative Professional, and the Medical Administrative Specialist programs. There is no test out available for this course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-140 or Typing Score, 020)

Complete Course Listing

**106-144 Meeting and Event Planning****Credits:** 2

This course introduces learners to planning activities, managing the finances, promoting the meeting/event, facilitating the on-site needs preparing minutes, and conducting follow-up activities while communicating effectively with all stakeholders. Learners complete several in-house and local meetings and events and plan complex meetings and events that include domestic and international ground and air travel and lodging for senior executives. Learners will prepare travel itineraries and items of special interest to the traveler.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (103-128) and (106-127) and (106-142)**Co-requisites:** (101-111)

Complete Course Listing

**106-145 Information Technology Essentials****Credits:** 3

This course provides an introduction to computers and information processing terms, hardware, software, networks, and buying a computer. Major topics also include effective use of a web browser, Microsoft Outlook's electronic mail, calendar, and contacts modules, and the basics of Windows operating system. Touch keyboarding skills are recommended.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-146 Word Processing Applications****Credits:** 3

Students use word processing software to create, format, and edit business documents applying features such as headers/footers, macros, merge, templates, tables, columns, outlines, fonts, and graphics. Software functions, theory and production will be assessed. Students will be prepared to take both the core level and expert level Microsoft Office Specialist certification exams. Touch keyboarding skills of 40 wpm for 5 minutes with 5 or fewer uncorrected errors are required for this course. Basic computer skills are recommended.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** Typing Score, 040

Complete Course Listing

**106-147 Administrative Office Management 1****Credits:** 1

This course introduces the administrative professional to their leadership role in the office setting as well as conflict resolution and problem solving techniques. Learners are also introduced to MS Access and process mapping tools.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (103-138 and 106-142 and 106-144**Co-requisites:** 106-150)

Complete Course Listing

**106-148 Administrative Professional Internship****Credits:** 1

This course is a work-based learning program at a business in the community. It is intended to provide students with actual work experience. Students will obtain a position at an approved worksite, and work a minimum of 48 hours under the supervision of both their instructor and an onsite supervisor.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-144) and (104-112) and (102-109) and (116-193)**Co-requisites:** (106-150) and (101-135) and (102-155)

Complete Course Listing

**106-150 Administrative Office Management 2****Credits:** 1

In this course, learners practice problem solving, time management, professional communication, and conflict resolution skills through research and case studies. Learners practice using MS Access and process mapping tools. learners also take the role as office leader, trainer, and coach for new employees. Learners develop a new employee onboarding plan that includes process maps for simulated complex office processes.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-144**Co-requisites:** 106-147)

Complete Course Listing

**106-151 Legal Office Procedures****Credits:** 4

This course is designed to cover the practical aspects of law office management, including the functions of management, administrative procedures, docket control, time and billing procedures, and case management. Job-seeking skills will be covered, including the preparation of a resume.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-176)

Complete Course Listing

**106-152 Legal Document Production 1****Credits:** 3

This course coordinates with other courses to provide specialized training in the understanding and actual preparation of legal documents. Areas of specialization include civil litigation, real estate, and divorce. Other topics covered include ethics, client interviews and interview forms, and court structure.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-138) and (106-146) and (106-181)

Complete Course Listing

**106-153 Administrative Office Procedures****Credits:** 3

This course covers office procedures concepts and practices. Students will develop proofreading skills for identifying and correcting punctuation, grammar, spelling, and usage errors. This course also includes editing skills for improving format, consistency, clarity, conciseness, and completeness. Activities require applying proofreading and editing skills to realistic business communications in both print and electronic formats. In addition, students learn the Association of Records Managers and Administrators (ARMA) filing rules through experience with various filing methods in a practice simulation. Students will also be introduced to file maintenance procedures, supplies, and equipment. Critical-thinking, problem-solving, and job performance skills in a global business environment are also included. Touch keyboarding and basic word processing skills are helpful.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-145 or 106-116)

Complete Course Listing

**106-154 Legal Document Production 2****Credits: 3**

Advanced legal procedures intended to provide more in-depth training on the order of events in several fields of law are presented in this course. Attorneys with expertise in each of these areas of law assist in teaching the units. The primary course objective is to provide in-depth procedural information in each area of law.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-152)

Complete Course Listing

**106-155 Publication Design and Production****Credits: 3**

Utilizing software such as Adobe InDesign, Photoshop, and Illustrator, this course introduces basic design principles related to business publications. Includes examination and use of technology tools most commonly used for publications in a business office. The focus of this course is based on touch keyboarding skills of 40 words per minute or higher in a 5 minute test with 5 or fewer errors and basic computer skills.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-156 Business Database****Credits: 3**

This course is designed to teach the basic elements of Microsoft Access. Applications will include the creation of a database; finding, displaying, and deleting records; providing listings and reports; making tables; and managing mailing lists. Students will be prepared to take the Microsoft Office Specialist certification exam. Basic computer skills are expected.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-158 Supervised Occupational Experience-Administrative Professional****Credits: 1**

This course consists of 72 hours of practical experience in an office environment. Students will be expected to obtain a job and demonstrate technical and interpersonal skills necessary for office employment. BTC instructors will coordinate management of students in approved positions under the supervision and guidance of cooperating employers. Students will also finalize employment portfolios and other employment related documents.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (101-102) and (106-156) and (106-165) and (106-181) and (106-182) and (106-183)**Co-requisites:** (106-160)

Complete Course Listing

**106-159 Business Spreadsheets****Credits: 3**

Using Microsoft Excel, students will learn the elements of a spreadsheet: worksheet capabilities (create, modify, enhance, save, print, and erase worksheets), graphing capabilities (create graphs, bar charts, and pie charts), and database capabilities (create, sort, and query). Students will be prepared to take both the core level and expert level Microsoft Office Specialist certification exams. Basic computer skills are expected.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-160 Administrative Office Management****Credits: 3**

This capstone course focuses on the leadership role for office management and enhances skills necessary to provide organizational and technical support in a contemporary office setting. Topics covered include project management, research, and travel and meeting planning.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (103-106) and (106-116) and (106-181) and (106-183)

Complete Course Listing

**106-165 Business Presentations and Training****Credits: 2**

Microsoft PowerPoint software will be used to create dynamic, professional-looking presentations. Emphasis will be on providing training to administrative staff that will cover analyzing/determining training needs, understanding learning styles, development of resources/curriculum, using presentation/training technologies, and evaluating training success. Students will be prepared to take the Microsoft Office Specialist certification exam. Touch keyboarding and basic word processing skills are necessary.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-176 Legal Office Applications****Credits: 3**

Legal Office Applications is a course designed to provide the student with the foundational skills needed to operate a computer in a law office environment and an introduction of some typical software applications used in a legal office.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-146) and (106-181)

Complete Course Listing

**106-181 Office Professionalism****Credits: 3**

The mission of the course is to empower students to enhance performance through personal self-management. The course, which is built around Tom Rath's "StrengthsFinder," provides an opportunity to develop both personally and professionally in effectively dealing with change. In addition, students will focus on the soft skills of team building and customer service through the use of problem-based video "field-trips". This course will utilize MS Outlook as a business communication tool.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-182 Office Project Management****Credits: 3**

This course will introduce students to Microsoft Office Project and Visio. This project-based course will have students apply basic skills and strategies for making effective business decisions, explore theory and application of project management, develop business acumen, and apply problem solving tools/techniques to business situations through the integration of the software resources presented.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-145 or 106-116)

Complete Course Listing

**106-183 Meeting and Event Planning****Credits:** 3

This course provides knowledge in basic project management skills utilizing meeting and event planning as the primary focus. Topics include conducting the planning activities, managing the finances, promoting the meeting/event, facilitating the on-site needs, analyzing contracts, preparing minutes, and conducting follow-up activities while communicating effectively with all stakeholders. The focus of this course is based on touch keyboarding skills of 40 words per minute or higher in a 5 minute test with 5 or fewer errors and basic computer skills.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (106-116) and (106-181)

Complete Course Listing

**106-184 Web Technologies Office Management****Credits:** 3

Intended to introduce students to advanced applications used by office professionals, this course provides an introduction to programs such as Adobe Acrobat, Illustrator, and Dreamweaver, Microsoft Publisher, and/or other computer applications used by administrative professionals. Students will apply basic skills and strategies for designing and maintaining a website and/or class intranet while exploring web office processes and procedures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-185 Medical Document Formatting****Credits:** 3

Students will learn to use word processing software to create, format, and edit medical documents. Course includes the development of proofreading skills for identifying and correcting punctuation, grammar, spelling, and usage errors. Work will also be done to improve speed and accuracy through the use of timed writings.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (106-127) and (Typing Score, 030)

Complete Course Listing

**106-186 Customer Service Essentials****Credits:** 1

This course is intended to teach students to identify internal/external customers, develop verbal, nonverbal, and listening communication skills, develop problem-solving techniques, and ways of adding value to a customer interaction. Additionally, students will examine how technology and social media impacts customer service, examine the impact of service breakdowns, and examine campaigns for customer loyalty. Students will develop the ability to lead and expand the customer service process, learn techniques for dealing with unhappy customers, and build skills for analyzing and prioritizing customer needs. The course will utilize MS Outlook as a business communication tool.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**106-309 Customer Service Essentials****Credits:** 1

This course is intended to teach students to identify internal/external customers, develop verbal, nonverbal, and listening communication skills, develop problem-solving techniques, and ways of adding value to a customer interaction. Additionally, students will examine how technology and social media impacts customer service, examine the impact of service breakdowns, and examine campaigns for customer loyalty. Students will develop the ability to lead and expand the customer service process, learn techniques for dealing with unhappy customers, and build skills for analyzing and prioritizing customer needs.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**106-330 Intro to Medical Transcription****Credits:** 3**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**106-335 Medical Word Processing****Credits:** 3**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**106-340 Information Processing****Credits:** 2**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**106-341 Keyboarding****Credits:** 1**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**106-345 Inform Processing Applications****Credits:** 8**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**106-350 Office Procedures****Credits:** 2**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**106-368 Medical/Surgical Transcription****Credits:** 4**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

## Pharmacy (536)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**536-302 Introduction to Pharmacy Practice****Credits: 1**

This course is an overview of the state and federal laws governing pharmacy practice. It will also provide an overview of the materials a student must master to work as a pharmacy technician. The student will learn the challenges associated with working as a healthcare professional. A thorough knowledge of weights and measures, and proficiency in the areas of fractions, ratios, proportions, decimals, and metric system conversions is strongly recommended for successful completion of this course.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**536-312 Therapeutic Agents****Credits: 4**

Students will learn the anatomy and physiology of the 13 systems in the human body. In addition, they will learn diseases that affect these systems. Students will be shown an overview of medicinal treatments for the diseases.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (536-302)

Complete Course Listing

**536-322 Pharmacy Calculations****Credits: 2**

The student will use basic algebra, ratios, conversions, and everyday mathematical formulas to complete pharmaceutical calculations.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (536-302)

Complete Course Listing

**536-332 Pharmacy Practice****Credits: 2**

Students will learn the day to day duties of a Pharmacy Technician in many different settings. Students will learn how to order medications, supplies, and devices from wholesalers. They will also learn how to maintain a profitable inventory and how to service pharmaceutical equipment. Students will learn the required record keeping necessary for maintaining a pharmacy with respect to state and federal laws.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (Background Check, P or Background Check, N)**Co-requisites:** (536-302) and (536-312)

Complete Course Listing

**536-342 Prescription Processing****Credits: 3**

In this course, students will learn how to interpret prescription orders and enter the orders into a computer system. Students will learn the top 200 medications in brand and generic forms, as well as their strengths, uses, and auxiliary labels. Students will also learn which medications are controlled and how they need to be handled differently compared to non-controlled medications.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (536-302) and (536-312) and (536-322)

Complete Course Listing

**536-352 Pharmacy Customer Service****Credits: 2**

The main focus of this class is professionalism on the job. Students will learn the soft skills needed to deal with difficult situations. Working with customers, phone skills, and conflict resolution are keys to this course. Students will participate in role plays in the classroom to learn how to act during adverse situations that may arise in a pharmacy setting.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (536-302)

Complete Course Listing

**536-362 Pharmaceutical Preparations****Credits: 4**

This course covers the variety of medication preparations for patient use. Students will prepare IV solutions, IM and SQ injections, various compounded creams, ointments, capsules, and suppositories. Students will label final products correctly and will use appropriate auxiliary stickers. Students will also review mathematical calculations.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (536-302) and (536-322)

Complete Course Listing

**536-372 Payment Processing****Credits: 2**

In this course the student will learn how to bill different entities for prescriptions and prescription services. This includes cash paying customers as well as those with insurance. This course provides an introduction to the differences between HMOs, PPOs, state funded insurances, federally funded insurances, and workman's compensation claims. This course introduces students to the information needed from the patient and pharmacy to process third party claims. Students participate in role playing scenarios for contacting insurance companies when experiencing difficulties receiving payment for prescriptions.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (536-302) and (536-322)**Co-requisites:** (536-342)

Complete Course Listing

**536-382 Pharmacy Clinical Practice****Credits: 2**

This course requires Pharmacy Technician students to integrate and apply knowledge and skills from all previous Pharmacy Technician courses in acute patient care settings. The settings include and are not limited to: retail pharmacies, hospital pharmacies, home infusion pharmacies, clinical pharmacies, compounding pharmacies, and nursing home pharmacies. The students will work under the direct supervision of pharmacists and certified technicians.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (536-312) and (536-322) and (536-332) and (501-107 or 103-106) and (501-101) and (801-390 or 801-311)**Co-requisites:** (536-342) and (536-352) and (536-362) and (536-372)

Complete Course Listing

## Physical Therapy Assistant (524)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**



### **524-139 PTA Patient Interventions**

**Credits:** 4

An introduction to basic skills and physical therapy interventions performed by the physical therapist assistant.

**Aid Code:** 10 - Associate Degree.

**Restrictions:** Restricted to students admitted to Physical Therapist Assistant Program.

Complete Course Listing

### **524-140 PTA Professional Issues 1**

**Credits:** 2

Introduces the history and development of the physical therapy program, legal and ethical issues, the interdisciplinary health care team, and professional communication skills.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

### **524-142 PTA Therapeutic Exercise**

**Credits:** 3

Provides instruction on the implementation of a variety of therapeutic exercise principles. Learners implement, educate, adapt, and assess responses to therapeutic exercises.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-156) and (524-157)

Complete Course Listing

### **524-143 PTA Therapeutic Modalities**

**Credits:** 4

Develops the knowledge and technical skills necessary to perform numerous therapeutic modalities likely to be utilized as a PTA.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-139)

Complete Course Listing

### **524-144 PTA Principles of Neuromuscular Rehabilitation**

**Credits:** 4

Integrates concepts of neuromuscular pathologies, physical therapy interventions, and data collection in patient treatment.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-142)

Complete Course Listing

### **524-145 PTA Principles of Musculoskeletal Rehabilitation**

**Credits:** 4

Integrates concepts of musculoskeletal pathologies, physical therapy interventions, and data collection in patient treatment.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-138 or 524-156) and (524-139) and (524-141 or 524-157)

**Co-requisites:** (524-142) and (524-143) and (524-147)

Complete Course Listing

### **524-146 PTA Principles of Cardiopulmonary & Integumentary Conditions**

**Credits:** 3

Integrates concepts of cardiopulmonary and integumentary pathologies, physical therapy interventions, and data collection in patient treatment.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-139) and (524-142)

Complete Course Listing

### **524-147 PTA Clinical Practice 1**

**Credits:** 2

Provides a part-time clinical experience to apply foundational elements, knowledge, and technical skills pertinent to physical therapy practice.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-139)

**Co-requisites:** (524-142) and (524-143)

Complete Course Listing

### **524-148 PTA Clinical Practice 2**

**Credits:** 3

Provides another part-time clinical experience to apply foundational elements, knowledge, and technical skills required of the entry level physical therapist assistant in various practice settings.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-142) and (524-143) and (524-145) and (524-147)

**Co-requisites:** (524-140) and (524-144) and (524-146)

Complete Course Listing

### **524-149 PTA Rehab Across the Lifespan**

**Credits:** 2

A capstone course that integrates concepts of pathology, physical therapy interventions and data collection across the lifespan. In addition the PTA's role in health, wellness and prevention; reintegration, and physical therapy interventions for special patient populations will be addressed.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-143) and (524-144) and (524-145) and (524-146) and (524-148)

Complete Course Listing

### **524-150 PTA Professional Issues 2**

**Credits:** 2

Incorporates professional development, advanced legal and ethical issues, healthcare management and administration, and further development of professional communication strategies.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-140) and (524-144) and (524-145) and (524-146) and (524-147)

Complete Course Listing

### **524-151 PTA Clinical Practice 3**

**Credits:** 5

Provides a full-time clinical experience to apply foundational elements, knowledge, and technical skills required of the entry level physical therapist assistant in various practice settings.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (524-140) and (524-144) and (524-146) and (524-148)

**Co-requisites:** (524-149) and (524-150)

Complete Course Listing



**524-156 PTA Applied Kinesiology 1****Credits:** 4

Introduces basic principles of musculoskeletal anatomy, kinematics, and clinical assessment. Students locate and identify muscles, joints, and other landmarks of the lower quadrant in addition to assessing range of motion and strength.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Physical Therapist Assistant Program.

Complete Course Listing

**524-157 PTA Applied Kinesiology 2****Credits:** 3

Applies basic principles from PTA Kinesiology 1 to the axial skeleton and upper quadrant including location and identification of muscles, joints and other landmarks. Assess range of motion and strength of the axial skeleton and upper quadrant. Integrate analysis of posture and gait.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Physical Therapist Assistant Program.**Pre-requisites:** (801-195 or 801-136) and (801-196) and (804-107) and (806-139) and (806-177)**Co-requisites:** (524-156) and (524-139)

Complete Course Listing

## Quality Interdisciplinary (625)

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**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****625-101****Credits:** 3

This course prepares participants to develop a philosophy of quality, incorporate a customer focus, contribute constructively in a team environment, and use a scientific approach to solve problems.

Application of basic quality concepts is emphasized.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Radiologic Technology (526)

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**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****526-122 CT Patient Interactions and Management****Credits:** 1

This course prepares the student to proficiently assess, manage, and interact with patients during Computed Tomography examinations. Course content includes all aspects of patient assessment and preparation as well as venipuncture and contrast media administration.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**526-123 CT Radiation Safety and Dose****Credits:** 1

This course prepares the student to proficiently manage all aspects of radiation safety in Computed Tomography as well as information related to the patient dose associated with Computed Tomography examinations. Course content includes a review of radiation physics as well as CT radiation protection principles.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**526-124 CT Image Formation****Credits:** 1

This course provides the student with information relative to CT system principles, operation, and components as well as the imaging parameters and data acquisition parameters the technologist can manipulate. Course content includes all of the image processing steps required to produce acceptable CT images.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Computed Tomography Program.

Complete Course Listing

**526-125 CT Image Evaluation and Archiving****Credits:** 1

This course provides the student with information relative to the evaluation and archiving of CT images. Course content includes the components of the image display, factors affecting image quality, and the recognition and reduction of image artifacts. This course also includes content related to the informatics necessary for the storage of CT images.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**526-126 CT Procedures of the Head, Spine, & Musculoskeletal System****Credits:** 1

This course provides students with instruction on the performance CT procedures of the Head, Spine, and Musculoskeletal System. Course content includes information related to procedure indications and contraindications, patient orientation, contrast media usage and positioning in these areas as well as differentiation of specific structures, patient symptomology and pathology.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**526-127 CT Procedures of the Neck and Chest****Credits:** 1

This course provides students with instruction on the performance CT procedures of the Neck and Chest. Course content includes information related to procedure indications and contraindications, patient orientation, contrast media usage and positioning in these areas as well as differentiation of specific structures, patient symptomology and pathology.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**526-128 CT Procedures of the Abdomen and Pel****Credits:** 1

This course provides students with instruction the performance CT procedures of the Abdomen and Pelvis. Course content includes information related to procedure indications and contraindications, patient orientation, contrast media usage and positioning in these areas as well as differentiation of specific structures, patient symptomology and pathology.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**526-130 Introduction to Diagnostic Medical Sonography****Credits:** 2

This course introduces the student to the history of ultrasound and the evolution of its medical applications. Topics include licensure, use and maintenance of ultrasound equipment, ergonomics, communication and critical thinking skills, and the responsibilities of Diagnostic Medical Sonographers in the workplace. Program policy and procedures, program curriculum and student rights and responsibilities are also included in this course.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Co-requisites:** 526-132

Complete Course Listing

**526-131 DMS General Procedures 1****Credits:** 4

This course prepares the Diagnostic Medical Sonography student to perform ultrasound evaluation of the liver, gall bladder, biliary tree, pancreas, kidneys, spleen, abdominal vascular system, and introduction to the female pelvis. The abdominal portion of this course will cover the anatomy, physiology, and the sonographic appearance of the peritoneal space, prevertebral vessels, biliary, liver and pancreas. Testicular small parts will discuss anatomy, physiology, pathology and pathophysiology of the scrotum. The gynecological portion of this course will cover normal anatomy and physiology of the female pelvis including the bony pelvis, vascular anatomy, muscles, ligaments, physiology of the menstrual cycle. The laboratory portion of this course permits the student to simulate ultrasound examinations of anatomical structures for the purposes of identification of structures and pathology, and to reinforce scanning technique in preparation for performing these examinations in the clinical setting. The diagnostic medical sonography student will be familiarized with the scanning protocols and normal and abnormal sonographic findings.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** (526-132 and 526-130) and 526-136

Complete Course Listing

**526-132 DMS Clinical 1****Credits:** 2

In the first clinical course for the Diagnostic Medical Sonography Program, students become acclimated to the clinical environment, become familiar with policies, procedures and protocols at the departmental and institutional level. Students begin the performance of Diagnostic Medical Sonography procedures under the direction of staff sonographers or program faculty in accordance with all program and institutional requirements.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Co-requisites:** 526-130

Complete Course Listing

**526-133 DMS General Procedures 2****Credits:** 4

This course prepares Diagnostic Medical Sonography Students to perform ultrasound evaluations of the male and female pelvis, first trimester obstetrics, introduction to second and third trimester obstetrics and thyroid exams. The gynecological portion of this course will cover normal anatomy and physiology of the female pelvis including the bony pelvis, vascular anatomy, muscles, ligaments, physiology of the menstrual cycle and normal anatomy of the pediatric and postmenopausal pelvis. The introduction to obstetrics will cover the physiology of pregnancy, embryology, spermatogenesis, oogenesis and the development of the fetus as visualized on ultrasound during the first trimester. This course will give the sonography students obstetrical ultrasound protocols and familiarize the student with normal fetal anatomy, as demonstrated on ultrasound. The laboratory portion of this course permits the student to simulate ultrasound examinations of anatomical structures for the purposes of identification of structures and pathology, and to reinforce scanning technique in preparation for performing these examinations in the clinical setting.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-131 and 526-134 and 526-136 and 526-205**Co-requisites:** 526-137 and 526-139 and 526-137 and 526-139 and 526-206

Complete Course Listing

**526-134 DMS Clinical 2****Credits:** 2

The second clinical course for the Diagnostic Medical Sonography Program builds on the knowledge and skills acquired during the first clinical course. Students continue to perform basic sonographic examinations of the abdomen, pelvis, and OB/GYN structures under the direct supervision of a registered sonographer, and begin to perform examinations with increased independence.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-132 and 526-130**Co-requisites:** 526-136 and 526-131 and 526-205

Complete Course Listing

**526-135 DMS General Procedures 3****Credits:** 3

This course prepares Diagnostic Medical Sonography Students to perform ultrasound evaluations of the adrenals, male pelvis, gastrointestinal tract, anterior abdominal wall, musculoskeletal system, thyroid, breast, scrotum and the gravid uterus. The abdominal portion of this course will cover the anatomy, physiology, pathology, pathophysiology, and the sonographic appearance of the adrenals, male pelvis, GI tract, anterior abdominal wall and musculoskeletal ultrasound. The small parts portion will discuss the anatomy, physiology, pathology and pathophysiology of the thyroid, breast and scrotum as visualized on ultrasound. The diagnostic medical sonography student will be familiarized with the scanning protocols and normal and abnormal sonographic findings. The obstetrical portion will cover fetal anomalies as visualized on ultrasound during the first trimester, second trimester, and third trimester. This course will cover abnormal fetal development to include discussion of pathology, pathophysiology and teratogens. The laboratory portion of this course permits the student to simulate ultrasound examinations of anatomical structures for the purposes of identification of structures and pathology, and to reinforce scanning technique in preparation for performing these examinations in the clinical setting.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-133 and 526-137 and 526-139 and 526-206  
Complete Course Listing**526-136 DMS Physics I****Credits:** 3

This course explores the principles of general wave physics as they apply to the application of Diagnostic Medical Sonography. The student will learn the physical factors that make the production necessary for the performance of diagnostic sonographic examinations. Topics also include transducer construction and operation, components of the ultrasound machine, display modes, image recording systems.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-132 and 526-130**Co-requisites:** 526-134 and 526-131 and 526-205  
Complete Course Listing**526-137 DMS Clinical 3****Credits:** 2

In the third clinical education course for the Diagnostic Medical Sonography Program, students continue the process of performing routine examinations of the abdomen, pelvis, small parts, and OB/GYN structures more independently, continuing the process of attaining clinical competency in these various procedures.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-131 and 526-134 and 526-136 and 526-205**Co-requisites:** 526-133 and 526-139 and 526-206  
Complete Course Listing**526-138 DMS General Procedures 4****Credits:** 4

This final general DMS procedures course permits the student to attain mastery of all sonographic anatomy, physiology, and pathophysiology of all anatomical parts and systems of the abdomen, small parts, and OB/GYN systems. The anatomy, physiology, pathology and pathophysiology of the breast will be discussed along with sonographic visualization and protocol. The abdomen and abdominal vasculature pathology and pathophysiology will be studied including the gastrointestinal tract and abdominal wall. The laboratory portion of this course permits the student to attain mastery of the scanning techniques of all ultrasound examinations of anatomical structures and associated with the abdomen, small parts, and OB/GYN systems.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-135 and 526-140**Co-requisites:** 526-207 and 526-142  
Complete Course Listing**526-139 DMS Physics 2 Instrumentation****Credits:** 2

This course continues building on the principles of general wave physics as they apply to the application of Diagnostic Medical Sonography. Topics include Doppler applications, imaging artifacts, and performance & safety. Biological effects of ultrasound energy are also explored. SPI registry review is the final component of this course.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-131 and 526-134 and 526-136 and 526-205**Co-requisites:** 526-133 and 526-206 and 526-137  
Complete Course Listing**526-140 DMS Clinical 4****Credits:** 1

In the fourth clinical education course for the Diagnostic Medical Sonography Program, students work towards attaining mastery of all ultrasound procedures of the abdomen and pelvis, small parts, and OB/GYN structures by performing these examinations with increased independence.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-133 and 526-137 and 526-139 and 526-206  
Complete Course Listing

**526-141 DMS Vascular Procedures 1****Credits:** 4

This course introduces the Diagnostic Medical Sonography student to the principles of vascular sonographic imaging. Topics include vascular physics and terminology, arterial, venous, and cerebrovascular applications of ultrasound, and normal, abnormal and pathologic sonographic presentation of vascular anatomy. The laboratory portion of this course permits the student to simulate ultrasound examinations of anatomical structures for the purposes of identification of structures and pathology, and to reinforce scanning technique in preparation for performing these examinations in the clinical setting.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** (526-135) and (526-140)**Co-requisites:** (526-138) and (526-142)

Complete Course Listing

**526-142 DMS Clinical 5****Credits:** 2

In the fifth clinical education course for the Diagnostic Medical Sonography Program, students continue the process of performing routine examinations of the abdomen and pelvis, small parts, and OB/GYN structures. Students also begin the process of observing and performing examinations of the peripheral vascular system under the direct supervision of a registered sonographer.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-135 and 526-140**Co-requisites:** 526-138 and 526-207

Complete Course Listing

**526-143 DMS Vascular Procedures 2****Credits:** 3

This is the second course designed to prepare the Diagnostic Medical Sonography student to perform ultrasonic evaluation of vascular sonographic structures. Topics include vascular anatomy, physiology, and terminology related to imaging of arterial, venous, and cerebrovascular structures. The laboratory portion of this course permits the student continued and advanced opportunity to simulate ultrasound examinations of anatomical structures for the purposes of identification of structures and pathology, and to reinforce scanning technique in preparation for performing these examinations in the clinical setting.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** (526-138) and (526-141) and (526-142)**Co-requisites:** (526-144) and (526-145)

Complete Course Listing

**526-144 DMS Clinical 6****Credits:** 2

In this final clinical education course for the Diagnostic Medical Sonography Program, the student completes the process of becoming competent in all general and abdominal, small parts, OB/GYN, and vascular sonographic procedures, and can perform all examinations required for graduation independently.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-138 and 526-207 and 526-142**Co-requisites:** 526-208 and 526-145 and 526-209

Complete Course Listing

**526-145 DMS Registry Review****Credits:** 2

This course is a review of all program curricula and musculoskeletal ultrasound, preparing the student to successfully sit for the certification examinations in Diagnostic Medical Sonography prepared by the American Registry of Diagnostic Medical Sonographers (ARDMS,) or the examination in Ultrasound prepared by the American Registry of Radiologic Technologists (ARRT). Various methods of preparation, including the use of mock examinations will be utilized.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-138 and 526-207 and 526-142**Co-requisites:** 526-208 and 526-144 and 526-209

Complete Course Listing

**526-146 DMS Cross Sectional Anatomy****Credits:** 2

This course challenges students who have an interest in sonography to apply their current knowledge of human anatomy and to reference the cross sectional world of imaging to that of ultrasound imaging. Students will learn to visualize anatomical structures in sonographic images as well as other imaging modalities such as computed tomography (CT scan) and magnetic resonance imaging (MRI). Anatomical structures will be studied in axial, sagittal, and coronal body planes. This course is designed to enhance the sonographer's scanning abilities in an attempt to reinforce knowledge of human anatomy.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Co-requisites:** (526-130) and (526-132)

Complete Course Listing

**526-147 CT Clinical 1****Credits:** 1

The first CT clinical education course allows the student to obtain the clinical experience requirements necessary to be eligible to sit for the post-primary ARRT certification examination in Computed Tomography (CT). This course is also intended to develop learner competence and expertise in a variety of CT procedures. Students may obtain CT examination only after completing corresponding CT Procedures courses.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (526-126) and (526-127) and (526-128)

Complete Course Listing

**526-148 CT Clinical 2****Credits:** 1

The second CT clinical education course allows the student to obtain any clinical experience requirements they have yet to complete that are necessary to be eligible to sit for the post-primary ARRT certification examination in Computed Tomography (CT). As with CT Clinical 1, this course is also intended to develop learner competence and expertise in a variety of computed tomography procedures. Students may obtain CT examination only after completing corresponding CT Procedures courses.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (526-126) and (526-127) and (526-128)

Complete Course Listing

**526-149 Radiographic Procedures 1****Credits:** 5

Prepares radiography students to perform routine radiographic procedures of the chest, abdomen, upper and lower extremities, and pelvis. Course includes considerations for mobile and trauma procedures. Students apply knowledge of human anatomy to position the patient correctly to achieve and evaluate optimal diagnostic quality images which includes identifying radiographically significant anatomy.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** 526-158**Co-requisites:** 526-159 and 526-192

Complete Course Listing

**526-150 Computed Tomography Sectional Anatomy and Pathology****Credits:** 3

Presentation of anatomical structures as they appear in Computed Tomography (CT) images produced in axial, sagittal, coronal, and oblique sections. This course will also explore pathological conditions commonly diagnosed through the use of CT.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Computed Tomography Program.

Complete Course Listing

**526-151 Computed Tomography Procedures****Credits:** 3

This course provides instruction of specific computed tomographic procedures and includes content related to procedure indications and contraindications, patient preparation, orientation, contrast media usage and positioning. Information related to patient history, assessment, and education is also included. CT procedures will be taught for differentiation of specific structures, patient symptomology and pathology. CT images studied will be reviewed for quality, anatomy and pathology.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Computed Tomography Program.

Complete Course Listing

**526-152 CT Physics and Instrumentation****Credits:** 3

This course is designed to promote an understanding of the physics of computed tomography. Topics covered include the characteristics of x-radiation and CT beam attenuation, as well as data acquisition and manipulation techniques. Computed tomography systems will be explored covering topics including CT tube configuration, collimator and detector design, and characteristics and functions and the CT computer. Lastly, CT image processing and display will be examined from data acquisition through post processing, archiving and communication.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Computed Tomography Program.

Complete Course Listing

**526-153 Computed Tomography Clinical****Credits:** 2

The CT clinical education course allows the student to complete the clinical experience requirements to be eligible to sit for the post-primary ARRT certification examination in Computed Tomography (CT). This course is also intended to develop competence and expertise in a variety of computed tomography procedures in the learner.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Computed Tomography Program.**Pre-requisites:** (526-150) and (526-151)

Complete Course Listing

**526-156 Pathophysiology****Credits:** 3

The major emphasis of this course will be on the physiological factors that underline diseases states. The study of the basic mechanisms of diseases commonly seen in primary care as well as disease processes that mimic more common disorders will be discussed. Pediatric, adult and geriatric age groups covered.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** (526-130) and (526-132) and (526-146)**Co-requisites:** (526-131) and (526-134) and (526-136)

Complete Course Listing

**526-158 Introduction to Radiography****Credits:** 3

Introduces students to the role of radiography in health care. Students apply healthcare communication techniques. Students are introduced to legal and ethical considerations, patient interactions and management, patient and provider safety, and pharmacology.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Co-requisites:** 526-168

Complete Course Listing



**526-159 Radiographic Imaging 1****Credits:** 3

Introduces radiography students to the process and components of analog imaging. Students determine the factors that affect image quality including contrast, density, detail, and distortion.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** 526-158**Co-requisites:** 526-149 and 526-192

Complete Course Listing

**526-168 Radiography Clinical 1****Credits:** 2

This beginning level clinical course prepares radiography students to perform radiologic procedures on patients with extensive supervision and direction. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Co-requisites:** 526-158

Complete Course Listing

**526-170 Radiographic Imaging 2****Credits:** 3

Explores film processing components as well as the principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within analog and digital systems. Principles of digital system quality assurance and maintenance are presented.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** 526-159

Complete Course Listing

**526-174 ARRT Certification Seminar****Credits:** 2

Provides preparation for the for the national certification examination prepared by the American Registry of Radiologic Technologists. Emphasis is placed on the weak areas of the individual students. Simulated registry examinations are utilized.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** 526-194**Co-requisites:** 526-189 and 526-197 and 526-198

Complete Course Listing

**526-189 Radiographic Pathology****Credits:** 1

Prepares radiography students to determine the basic radiographic manifestations of pathological conditions. Students classify trauma related to site, complications, and prognosis and locate the radiographic appearance of pathologies.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** 526-231**Co-requisites:** 526-197 and 526-174 and 526-198

Complete Course Listing

**526-190 Radiography Clinical 5****Credits:** 2

This fifth level clinical course prepares radiography students to perform radiologic procedures on patients with some supervision. Students apply radiation protection and standard precautions in the production of radiographs in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 526-199**Co-requisites:** 526-231 and 526-195

Complete Course Listing

**526-191 Radiographic Procedures 2****Credits:** 5

Prepares radiography students to perform routine radiographic procedures of the skull, facial bones, sinus, spine, bony thorax, gastrointestinal, urological, and special studies. Course includes considerations for contrast, mobile, surgical and trauma procedures. Students apply knowledge of human anatomy to position the patient correctly to achieve and evaluate optimal diagnostic quality images which includes identifying radiographically significant anatomy.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** (526-149)**Co-requisites:** (526-230) and (526-193)

Complete Course Listing

**526-192 Radiography Clinical 2****Credits:** 3

This second level clinical course continues to prepare radiography students to perform radiologic procedures on patients with considerable direct and limited indirect supervision. Students apply radiation protection and standard precautions in the production of radiographic images in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 526-168**Co-requisites:** 526-149 and 526-159

Complete Course Listing



**526-193 Radiography Clinical 3****Credits:** 3

This third level clinical course prepares radiography students to perform radiologic procedures on patients with varying degrees of direct and indirect supervision. Students apply radiation protection and standard precautions in the production of radiographic images in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the demonstration of communication and critical thinking skills appropriate to the clinical setting.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 526-192**Co-requisites:** 526-191 and 526-230

Complete Course Listing

**526-194 Imaging Equipment Operation****Credits:** 3

Introduces radiography students to the principles and application of x-ray technology. Students analyze how x-rays are produced and determine the corrective actions necessary for common equipment malfunctions.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Co-requisites:** 526-195 and 526-190

Complete Course Listing

**526-195 Radiographic Quality Analysis****Credits:** 2

Prepares radiography students to analyze radiographic images for quality. Students apply quality control tests to determine the causes of image problems including equipment malfunctions and procedural errors.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** 526-191**Co-requisites:** 526-231 and 526-190

Complete Course Listing

**526-196 Modalities****Credits:** 3

Introduces radiography students to imaging modalities with an emphasis in computed tomography and cross-sectional anatomy.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.

Complete Course Listing

**526-197 Radiation Protection and Biology****Credits:** 3

Prepares radiography students to protect themselves and others from exposure to radioactivity. Students examine the characteristics of radiation and how radiation affects cell biology. Students apply standards and guidelines for radiation exposure.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** 526-194**Co-requisites:** 526-189 and 526-174 and 526-198

Complete Course Listing

**526-198 Radiography Clinical 6****Credits:** 2

This final clinical course requires students to integrate and apply all knowledge learned in previous courses to the production of high quality images in the clinical setting with minimal direct and primarily indirect supervision. Students apply radiation protection and standard precautions in the production of images in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 526-190**Co-requisites:** 526-189 and 526-197 and 526-174

Complete Course Listing

**526-199 Radiography Clinical 4****Credits:** 3

This fourth level clinical course prepares radiography students to perform radiologic procedures on patients. The student transitions from direct to indirect supervision as competency performance increases. Students apply radiation protection and standard precautions in the production of radiographic images in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 526-193

Complete Course Listing

**526-205****Credits:** 2

This course introduces the Diagnostic Medical Sonography student to the principles of vascular sonographic imaging. Topics include vascular physics, terminology, hemodynamics, and cerebrovascular applications of ultrasound, and normal, abnormal and pathologic sonographic presentation of vascular anatomy. The laboratory portion of this course permits the student to simulate ultrasound examinations of anatomical structures for the purposes of identification of structures and pathology, and to reinforce scanning technique in preparation for performing these examinations in the clinical setting.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** (526-130 and 526-132)**Co-requisites:** 526-131 and 526-134 and 526-136

Complete Course Listing

**526-206****Credits:** 2

This is the second vascular course designed to prepare the Diagnostic Medical Sonography student to perform ultrasonic evaluation of vascular sonographic structures. Topics include vascular anatomy, physiology, and terminology related to imaging of arterial, venous peripheral vascular structures. The laboratory portion of this course permits the student continued and advanced opportunity to simulate ultrasound examinations of anatomical structures for the purposes of identification of structures and pathology, and to reinforce scanning technique in preparation for performing these examinations in the clinical setting.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to 105262, Diag Med Sonography Vascular Programs.**Pre-requisites:** 526-131 and 526-134 and 526-136 and 526-205**Co-requisites:** 526-133 and 526-137 and 526-139

Complete Course Listing

**526-230****Credits:** 2

Explores film processing components as well as the principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within analog and digital systems are also discussed. Principles of digital system quality assurance and maintenance are presented.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** 526-159**Co-requisites:** 526-191 and 526-193

Complete Course Listing

**526-231****Credits:** 2

Introduces radiography students to imaging modalities with an emphasis in computed tomography and cross-sectional anatomy.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Radiography Program.**Pre-requisites:** 526-230**Co-requisites:** 526-196 and 526-195 and 526-190

Complete Course Listing

**526-245****Credits:** 3

This is the third vascular course designed to prepare the Diagnostic Medical Sonography student to perform ultrasonic evaluation of vascular sonographic structures. Topics include and continuation of peripheral vascular structures and vascular anatomy, physiology, and terminology related to imaging of abdominal vascular structures. The laboratory portion of this course permits the student continued and advanced opportunity to simulate ultrasound examinations of anatomical structures for the purposes of identification of structures and pathology, and to reinforce scanning technique in preparation for performing these examinations in the clinical setting.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (526-135 and 526-140)**Co-requisites:** (526-138 and 526-142)

Complete Course Listing

**526-246****Credits:** 1

This is the fourth vascular course designed to prepare the Diagnostic Medical Sonography student to perform ultrasonic evaluation of vascular sonographic structures. Topics include US guided procedures, surgery, QA, statistical testing and lab accreditation. This courses will also cover VT registry review and board preparation.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (526-138 and 526-245 and 526-142)**Co-requisites:** (526-144 and 526-247 and 526-145)

Complete Course Listing

**526-247****Credits:** 1

A capstone course that prepares the student for the transition from student to staff sonographer. Current issues that challenge the entry-level sonographer along with new and future sonographic techniques will be discussed. Other topics covered include resume writing, job interviewing, networking and professional development.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (526-138 and 526-245 and 526-142)**Co-requisites:** (526-144 and 526-246 and 526-145)

Complete Course Listing

## Reading (858)

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**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****858-713 BSE Reading 1****Credits:** 3

Introduces basic reading skills needed by adults for everyday living. The students expand their vocabulary by learning to recognize and pronounce words. Emphasis is placed on understanding the material read, including books, computer software and newspaper articles. A variety of instructional approaches will be used.

**Aid Code:** 73 - Beg ABE (0-5.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**858-762 Reading 2****Credits:** 3

This course will include dictionary use, vocabulary in context, main ideas, supporting details, inferences and vocabulary building. Successful completion of Reading 2 is required for progression to Reading 3. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).**Pre-requisites:** (COMPASS Reading Skills, 001 or AccuPlacer Reading Comp, 020 or ACT Reading, 01 or Next Gen AccuPlacer Reading, 213)

Complete Course Listing

**858-763 BSE Reading for Accuplacer****Credits:** 2

This course will provide instruction in reading skills needed to be successful on the Accuplacer reading test.

**Aid Code:** 74 - Interm ABE (6.0-8.9).

Complete Course Listing

**858-764 Reading 2 GED Review****Credits:** 3

The course focuses on reading in the GED content areas. It includes skills of comprehension, application, and analysis as needed for the GED content area tests at the pre-GED level. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**858-771 Reading 3 GED Review****Credits:** 3

This course further develops reading in the GED content areas. It includes continued work in comprehension, application and analysis as needed for the GED content area tests. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).

Complete Course Listing

**858-790 Reading 3****Credits:** 2

This course focuses on word analysis strategies, building vocabulary and comprehending at an inferential and critical level. The purpose is to establish the groundwork for college reading. Successful completion of Reading 3 with a C or better is required for progression to Intro to College Reading. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).

**Pre-requisites:** (ASSET Reading Skills, 31 or COMPASS Reading Skills, 033 or ACT Reading, 10 or AccuPlacer Reading Comp, 034 or Next Gen AccuPlacer Reading, 223 or 858-762)

Complete Course Listing

**858-795****Credits:** 1

A small group and individualized instruction course that helps students develop precollege reading skills. Emphasizes reading comprehension and learning strategies. Must be taken concurrently with Intro to College Reading.

**Aid Code:** 77 - ASE Developmental.

**Pre-requisites:** (COMPASS Reading Skills, 50 or ACT Reading, 11 or SAT Reading, 260 or AccuPlacer Reading Comp, 54 or Next Gen AccuPlacer Reading, 235)

**Co-requisites:** (838-104)

Complete Course Listing

## Science (856)

**Information provided includes course descriptions by subject only.**

**For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**856-779 BSE Science 3 Pharmacology Preparation****Credits:** 2

Designed for students entering the Associate Degree Nursing program. The course will be an introduction to pharmacology, one of the hardest courses taken by nursing students. In addition, students will develop other skills needed for success (and survival) in the nursing program, such as test taking strategies and writing papers in APA format. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

**856-785 BSE Science 3, Anatomy and Physiology Preparation****Credits:** 2

Prepares students for the college level courses of anatomy and physiology needed by nursing, physical therapy, and other health related programs. Competency objectives are based on the skills needed to be successful in future courses in anatomy and physiology. Basic concepts in anatomy and physiology are covered along with study skills to help students become "self-learners". \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

**856-787 BSE Science 3, Chemistry Preparation****Credits:** 3

Designed for students entering particular vocational/technical programs that require basic knowledge of chemistry. Students learn basic chemical principles by listening to lectures, participating in class discussions and laboratory experiments. Equivalent to a full-year of high school chemistry. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

**856-796 Kinesiology Preparation****Credits:** 2

Designed for students entering the Physical Therapy Assistant program. The course will be an introduction to kinesiology. Introduces basic principles in musculoskeletal anatomy, kinematics and the identification of joints and muscle attachments and actions. \*Credit earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

## Social Science (809)

**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**809-103 Think Critically and Creatively****Credits:** 3

This course provides instruction in the vital, realistic and practical methods of thinking which are in high demand in all occupations of substance today. Decision making, problem solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more are considered in depth as the student applies specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is demonstrations, discussions, project and teamwork based. Assignments range from the short and simple to the detailed and complex. Reality and practicality are the focuses all through the course.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**809-122 Intro to American Government****Credits:** 3

Introduces American political processes and Institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties and public opinion in the political process. Also explores the role of state and national government in our federal system.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 73 or ACT Reading, 16 or AccuPlacer Reading Comp, 76 or Next Gen AccuPlacer Reading, 251) or SAT Reading, 330 or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**809-143 Microeconomics****Credits:** 3

This course examines the behavior of individual decision makers, primarily consumers and firms. Topics include choices of how much to consume and to produce, the functioning of perfectly and imperfectly competitive markets, the conditions under which markets may fail, and arguments for and against government intervention. The student applies the fundamental tools of economics to real world problems.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 250 or SAT Reading, 330 or Test Waived-College Degree or Reading-Credit Level Met or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or AccuPlacer Reading Comp, 55 or ACT Reading, 12 or SAT Reading, 270 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**809-144 Macroeconomics****Credits:** 3

Macroeconomics is an introductory course. Basic social choices regarding economic systems, basic economic aggregates, fiscal policy, the banking system, monetary policy, and international trade are the principle topics discussed in the course. Balance is drawn between theory, analysis, and a critique of the institutions that characterize modern mixed-capitalist economies. Conflicting social goals, economic constraints, and environmental concerns provide the framework through which the macroeconomy is analyzed.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** COMPASS Reading Skills, 73 or ACT Reading, 16 or AccuPlacer Reading Comp, 76 or Next Gen AccuPlacer Reading, 251 and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or AccuPlacer Reading Comp, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**809-159 Abnormal Psychology****Credits:** 3

The course in Abnormal Psychology surveys the essential features, possible causes, and assessment and treatment of the various types of abnormal behavior from the viewpoint of the major theoretical perspectives in the field of abnormal psychology. Students will be introduced to the diagnosis system of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). In addition, the history of the psychology of abnormality will be traced. Cultural and social perspectives in understanding and responding to abnormal behavior will be explored as well as current topics and issues within abnormal psychology.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (809-198) and 801-195 or 801-136 or (ACT Reading, 16 or COMPASS Reading Skills, 73 or AccuPlacer Reading Comp, 76 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree)

Complete Course Listing

**809-166 Introduction to Ethics: Theory and Application****Credits:** 3

This course provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social and/or professional standards of behavior, and apply a systematic decision-making process to these situations.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 250 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and ASSET Reading Skills, 55 or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing

**809-172 Introduction to Diversity Studies****Credits:** 3**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or SAT Reading, 260 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing

**809-174 Social Problems****Credits:** 3

Explores the causes of and possible solutions to selected social problems such as inequality, crime and deviance, and poverty. Students will examine the interrelationship of social problems and their roots in fundamental societal institutions.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (809-196 or Test Waived-College Degree)  
Complete Course Listing

**809-188 Developmental Psychology****Credits:** 3

Developmental Psychology is the study of human development throughout the lifespan. This course explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills will enable students to gain an increased knowledge and understanding of themselves and others.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Writing Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing

**809-195 Economics****Credits:** 3

This course is designed to give an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing



**809-196 Introduction to Sociology****Credits:** 3

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 260 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**809-198 Introduction to Psychology****Credits:** 3

This introductory course in psychology is a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or SAT Reading, 330 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-199) and COMPASS Writing Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**809-199 Psychology of Human Relations****Credits:** 3

Explores the relationship between the general principles of psychology and our everyday lives. Students are given the opportunity to achieve a deepened sense of awareness of themselves and others. This understanding enables students to improve their relationships with others at work, in the family, and in society.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-196 or 809-198) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**809-352 Skills for Successful Employee****Credits:** 2

This course seeks to ready the student for employment by discussing specific "human" skills that lead to success on the job. The topics presented may include: the importance of having a good attitude; the need to recognize that customers "buy" much more than a clearly defined product or service; and knowing how to treat customers, how to influence them, how to handle complaints, and how to sell. Students will also become aware of the need for self-organization, for innovation, for teamwork, and for effective management.

**Aid Code:** 31 - One-year Technical Diploma.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or Test Waived-College Degree or 838-104 or 838-104)

Complete Course Listing

**809-700 Growth, Relationships, Information & Technology****Credits:** 1

GRIT is a course that is designed to support students in their first semester to recognize their ability to grow and persist in college. Students will become more familiar with various academic and non-academic support services available to them such as career guidance, tutoring, financial assistance and academic counseling. Computer technology skills and college readiness skills such as time management, critical thinking/reading and student strategies will be emphasized to support student success.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Social Science (859)

Information provided includes course descriptions by subject only.

For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).



**859-762 BSE Social Science 2 Review - Storefront****Credits:** 3

This course allows students to work on any area in the social sciences that they need to review to be successful in later course work, on the GED tests, or in their career.

**Aid Code:** 74 - Interim ABE (6.0-8.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing

**859-773 BSE Social Science, Civics, HSED****Credits:** 2

This course is an overview of the American government and how it impacts and influences the lives of American citizens. Areas of concentration are colonization, the constitution, branches of government, checks and balances, the Bill of Rights, state and local governments and citizen responsibility. Students who finish 30 hours of instruction in this course meet the citizenship requirement for the HSED certification.

**Aid Code:** 76 - HS Dip, GED, HSED (9.0-12.9).

Complete Course Listing

## Substance Use Disorder Counseling (550)

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Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**550-100 AODA Assessment, Diagnosis & Treatment****Credits:** 3

Learners take an in-depth look at assessment, diagnosis and treatment in the substance use disorder field. Students develop a working knowledge of gathering and interpreting information used in forming diagnoses based on the criteria in the DSM-V. Learners will explore various diagnostic tools and determine the level of care utilizing the Wisconsin Uniform Placement Criteria. Students are introduced a variety of counseling theories, co-occurring disorders, modalities and techniques used to treat substance use disorders.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**550-115 Understanding Addiction****Credits:** 3

This course provides an overview of addiction, including classification and basic pharmacology of drugs, basic physiology and effects of drug use on the human body and patient. Students will examine client learning styles and group teaching methods, delivery of educational programs, health and behavior problems related to substance use and basic life skills such as stress management, communication and assertiveness.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**550-118 AODA Case Management****Credits:** 3

Learners will analyze case scenarios to practice the process of ethical decision making. Learners will evaluate the ethical codes of substance use disorder counseling to increase ability to apply these ethical principles to a variety of scenarios. Learners will also determine professional boundary issues and incorporate ethical standards into the decision making process.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**550-119 AODA Counseling****Credits:** 3

Students will learn foundational building block skills in the counseling relationship and learn how to establish a solid therapeutic relationship. Students will also apply basic counseling techniques and study reporting and management of counseling cases. Performance will be evaluated through mock counseling sessions and personal experience reflections. Students will work to determine issues of boundaries and ethics and apply reflective practitioner methods.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**550-120 Psychopharmacology****Credits:** 3

Learners will be introduced to the basic concepts of psychopharmacology and the function of the organs and systems of the human body and brain. Students will assess boundaries and ethical issues commonly found working with mental health and substance use services. Apply reflective practitioner methods.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**550-139 AODA Internship 2****Credits:** 3

Provides the learner with the opportunity to assume greater responsibility and more of the duties of a substance abuse counselor in actual clinical practice. The course provides the learner with opportunities to strengthen skills and to experience the full range of responsibilities assumed by an AODA counselor while being supervised by an experienced substance abuse professional.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (550-160)

Complete Course Listing

**550-160 AODA Internship 1****Credits:** 3

An on-site experience during which the learner is oriented to the environment of substance abuse treatment. Supervised practice in the 12 core functions of counseling including assessment, group and individual counseling, case management, and consultation is offered.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (520-102 and 520-100 and Background Check, P)

Complete Course Listing

## Supervision & Leadership Devlp (196)

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Information provided includes course descriptions by subject only.

**For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

### **196-100 Supervision 1**

**Credits: 1**

This course introduces the basics of managing people. Learners will understand how attitude plays a significant role in creating a supportive work environment. Other topics include building trust, motivating and empowering employees to promote retention, and improving work relations through support and asking the right questions. Training and assessing employee understanding of the work processes and procedures is studied along with creating solid goals and expectations to promote employee success.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

### **196-101 Principles of Supervision**

**Credits: 3**

This course is designed to give the student an overview of such supervisory skills as leadership and interpersonal skills, motivation communications, decision-making and training at the first-line supervision level. The duties and responsibilities of supervisors, the role of supervisors, the role of supervision in an organization and making the transition to supervision are also included.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

### **196-102 Employee Training and Development**

**Credits: 3**

This course explains the fundamentals of training and development coordination. It includes terminology, levels of learning, matching training providers with organization needs, organizing materials and environments to maximize learning, measuring completion of objectives, and communication with employees. Students analyze local organizations to determine both training needs and the most appropriate training methodologies, in order to solve common business problems. Teams of students develop training plans, create a sample lesson plan, and present the lesson to the class.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

### **196-103 Employment Law**

**Credits: 3**

Introduces and explores legal issues concerning employment and their effect on the workplace. Through in-depth case analyses, oral presentations, and debates, students learn about the intricacies of federal and Wisconsin equal employment opportunity laws. Topics include legislation and Supreme Court decisions related to civil rights, age discrimination, disabilities, pay equity, affirmative action, etc.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

### **196-108 Health, Safety and Security**

**Credits: 3**

The importance of workplace safety for the worker, the employer and the community is emphasized. Students review the various safety and health issues affecting today's business organizations and workplaces. OSHA regulations play a key role in understanding compliance issues. Teams of students conduct research on a specific safety topic and conduct a safety presentation based on their research.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

### **196-109 Followership**

**Credits: 3**

This course examines the multiple roles followers play in their relationship to leaders and the organization and explores the practices that promote positive followership; and the part that followers have in setting the standards and formulating organizational culture.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

### **196-110 Leadership and Change**

**Credits: 3**

In today's face-paced world, simply managing change is insufficient. Successful change requires leadership. The emphasis of this course is the study and application of a comprehensive change framework that can be followed by organizational leaders at all levels. Topics include creating a vision for change, developing employees to implement change, the risk of change, eliminating barriers to change and sustaining the change.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

### **196-111 Project Management for Supervisors**

**Credits: 3**

Learners will recognize the role of projects and the importance of project management in the current business environment. Learners will develop successful proposals, plan, schedule, and budget a project. Learner will use computer software to assist them in controlling the progress of the project. Learner will acknowledge firsthand the importance of people skills in managing a project.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

### **196-112 Applications of Technology**

**Credits: 3**

This course focuses on the utilization of multimedia to design, develop, and deliver, effective presentations to the work environment. The role of a leader in the advocacy for technology innovation will be applied to various situations.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

**196-113 Evolution of Management****Credits: 3**

A comprehensive understanding of the origin and development of ideas in management is necessary to move the practice forward. This course traces the evolution of management thought from its earliest days to the present, by examining the backgrounds, ideas and influences of its major contributors within a historical context.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-114 Fundamentals of Budget Analysis****Credits: 3**

The learner analyzes the fiscal components of a business by evaluating financial statements and annual reports that are relevant to the supervisor and decision-making. Each learner will evaluate and review ratios, trends, and develop a budget, and monitor the results. This course is a practical hands-on approach to interpreting accounting and financial reports as a non-accountant.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-115 Compensation and Benefits****Credits: 3**

This course focuses on the compensation and benefit elements that make up total compensation. This course covers base pay, merit pay and variable pay programs and examines such benefits as government regulation, group welfare plans, pension plans and flexible benefit plans. Students learn to apply the principles of compensation management to maintain an organization's competitive advantage while complying with state and federal law. Topics include job analysis, descriptions, and evaluation; pay and benefits surveys; budgeting as related to compensation; and comparable worth issues. The course promotes an understanding of mandated and discretionary employee benefits. It will focus on the major categories of benefits, including planning and administration, compliance with regulations, insurance, retirement plans, paid time off from work, accommodation and enhancement benefits. The students will participate in a variety of activities in which they will investigate current benefits programs, design or modify benefits programs to reflect today's work environment, and administer benefits thought simulations and role playing. As a major team project, students complete a simulation to design a complete compensation and benefits program.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-116 Staffing Organizations****Credits: 3**

Learners will focus on recruitment, selection, orientation and hiring practices. This course examines what today's workforce expects and how to efficiently use the recruitment budget. All steps of the hiring process are reviewed. This material supplements the legal aspects of the employment process. Students develop the tools necessary for interviewing individuals in a variety of settings. Through hands on projects students practice their skills by completing probing, survey, recruitment, employment, and performance interviews.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-118 Human Resource Information Systems****Credits: 3**

Learns will cover the fundamentals of human resource record-keeping. Topics include organizing records, federal and state retention requirements, documentation, employee access to records, privacy issues, and developing policies. Students learn to use the integrated human resource information components of a relational database (such as Access or PeopleAdmin) to perform human resource database tasks related to administration, performance management, compensation, recruitment, and more. In a series of exercise, students process the HR information related to groups of employees as these employees move through the application selection, promotion, retention and retirement phases of employment.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 103-106

Complete Course Listing

**196-119 Labor and Employee Relations****Credits: 3**

Students author contract proposals, negotiate changes to an existing labor agreement, and administer specific labor contract language. Through discussion and case analyses, students learn the legal requirements and restriction for labor and management. Topics include the legalities of union certification and decertification, negotiation and administration of labor agreements, strikes, lockouts, mediation, and arbitration. Enhances the ability to understand and develop employee-focused programs, policies and procedures such as company orientation, formal and informal communications, employee recognition programs and community relations, complaint investigation and resolution, and disciplinary procedures.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-128 Leadership Internship****Credits: 3**

Students further develop their knowledge and skills by working with professionals to complete projects for area organizations. Evaluation of students' work will be heavily influenced by the satisfaction expressed by representatives of the organizations served.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** Need Dean Approval

Complete Course Listing

**196-135 Leadership: Individual to Team****Credits: 3**

This course focuses on how to build and lead successful teams to strengthen the overall performance of organizations. Team building models will be analyzed with emphasis on steps that can be taken to overcome common hurdles and build cohesive, high performing teams. An emphasis will be placed on the stages of team development, roles of the leader in developing successful work and project teams. Facilitation tools, problem-solving strategies, facilitation tools and conflict resolution techniques will be introduced during an in-class team simulation.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-137 Payroll Administration****Credits:** 3

This course provides you with a framework and the knowledge of administering a payroll system within the context of a business. An overview of interpreting financial statements and preparing budgets is included. The topics covered include the following: maintaining payroll records; salaried, hourly, commission, piecework, and contract workers; taxable benefits; statutory and other deductions; preparation of payroll journal entries; preparation of record of employment; preparation of W2s, W4s, and W2 Summary; workers' compensation; employment standards; pay equity; computerized payroll using both a personal computer database and using an outside payroll service.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 196-115

Complete Course Listing

**196-138 Human Resource Practicum****Credits:** 3

Students further develop their HR knowledge and skills by working with HR professionals to complete human resource projects for area organizations. Teams of students are provided actual problems or projects from local organizations. Evaluation of student's work will be heavily influenced by the satisfaction expressed by representatives of the organizations served.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (196-102) and (196-115) and (196-116) and (196-193)

Complete Course Listing

**196-139 Introduction to Global Human Resource****Credits:** 3

In this course, students will examine human capital in a global business environment. The topics cover major cultural difference in values and attitudes which may affect international HRM effectiveness, global staffing international compensation, employee relations, labor law, and encourage students to identify the future issues of international HRM of their organizations.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 196-193

Complete Course Listing

**196-140 Supervision 2****Credits:** 1

Learners will determine how to increase personal productivity every day, and how to get the most productivity from the team while maintaining quality and employee well-being. Topics include planning and preparation for the day, goal-setting, time management, delegating work, eliminating distractions, taking breaks, and more, to attain productivity and quality goals. Learners will determine how to identify, measure, and influence successful outcomes of individual productivity as well as department productivity.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-152 Talent Management****Credits:** 3

This course focuses on improvement or correction of employee performance. Methods will be practiced concerning performance evaluation, coaching skills, career counseling, termination, facilitating change in work procedures and job design and managing the conflict that often results from change. Students will obtain a better understanding of how to clearly communicate performance expectations to an employee while maintaining dignity in the process.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-153 Supervision 3****Credits:** 1

Learners will learn how to deal with difficult employees while maintaining composure. Learners will determine the difference between counseling and correcting employees along with effective methods for each.

Learners will understand accountability for themselves and the employees who report to them. Discussions provide understanding of the employee evaluation process and the discipline process. Focus is "When a supervisor does a good job of leading, problem-solving, communicating, and motivating, MOST employees will perform well."

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-154 Leadership 1****Credits:** 1

Learners are introduced to leadership theories and practices. The roles of management vs. leadership are explored with a focus on proactive leadership. Learners complete a self-test to determine their own leadership behavior style; and also explore these topics for building effective relationships in the workplace: trust, positive and open communication, expecting the best from your team, creating team spirit, giving recognition and appreciation, giving credit and taking responsibility, being proactive, creating a positive physical work environment, making staff evaluations positive, and having fun at work. Learners understand the characteristics of an effective leader and learn how to adapt leadership styles for a variety of situations.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-155 Leadership 2****Credits:** 1

Learners will review the anatomy of a conflict and complete a self-test to determine their conflict management style to improve performance. Learners study how emotions escalate a conflict situation and how to manage emotions to prevent further conflicts including how to have difficult conversations with employees. Learners will understand how change and change management plays a significant role in effective leadership. Recognizing that effective change requires a holistic view of the team, or organization, learners will explore an 8-step process for leading change in the workplace.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-156 Leadership 3****Credits:** 1

Learners explore the characteristics of effective and influential leadership that encourages rather than discourages. Many topics will be studied such as personal branding, communication, and approachability. Learners will develop a strong understanding of how image (words and behavior) affects professional presence, personal reputation, and company brand. Focus in this course is on leadership roles, empowering employees, and recognizing employees for their good work and positive contributions. Learners will determine how to set-up performance expectations, and how the role of empowerment motivates employees to achieve company goals.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-157 Essentials of Quality 1****Credits:** 1

In this first course, learners examine the role of the supervisor in assisting an organization to produce a quality product and/or service. Learners are introduced to Total Quality Management concepts and tools needed in the workplace to stay competitive.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-158 Essentials of Quality 2****Credits:** 1

In this second course, learners begin to develop a personal philosophy of quality, identifying stakeholder relationships, and determining how to meet/exceed customer expectations. Learners will begin to evaluate process weaknesses to select specific time based improvement techniques.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (196-157)

Complete Course Listing

**196-159 Essentials of Quality 3****Credits:** 1

In this third course, learners will map and evaluate processes, looking for areas of improvement by reducing internal time and effort, reducing opportunities for defects, and areas that will increase overall customer satisfaction.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (196-158)

Complete Course Listing

**196-161 Teambuilding and Communication 1****Credits:** 1

Learners explore the components of an effective team environment. Individual roles within the team and team problem-solving are examined and applied. The role of effective communications and its importance to team success is introduced. Learners will understand how to recognize and manage the stages of team development by focusing on team goals, and how to encourage and honor the strengths of each individual and the contributions to team success. Emphasis is placed on how an inviting, kind, and encouraging workplace culture can engage and retain employees. Focus is on individual strengths, meeting individual needs for success, and team focus on goals and expectations.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-162 Teambuilding and Communication 2****Credits:** 1

Learners will explore several motivation theories in this course including to influence workers to become more productive or perform at higher levels of quality. Learners will determine how to influence employees by helping to set SMART goals, by using energizing techniques, and by rewarding the positive behavior desired in the workplace. Learners understand how behavior as a leader can truly motivate the team on a daily basis. In addition, learners will gain knowledge in how to set goals with "SPIRIT" in order to guide employees through annual professional development planning; explore an effective format for interviewing employees during performance reviews; and, how to develop probing questions to encourage the employee to take an active role in the discussions on job performance.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-163 Teambuilding and Communication 3****Credits:** 1

Learners will understand how to take a team from good to great by effectively engaging them in their work on a daily basis. This course provides insight on how to encourage the heart of every employee to feel belonging in the work community through friendly interaction, constructive conflict, and creative problem solving. Employee engagement leads to long-term retention, so this course is critical in understanding how to prevent employee turn-over. Learners will understand how Emotional Intelligence (maturity) plays a significant role in how we manage our emotions in connection with the people we work with. Learners will explore ways to better understand human emotions, keep them in control, and work effectively to move forward productively.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing



**196-164 Leadership Practicum****Credits:** 1

Learners will obtain a practicum with area business leaders in order to job shadow for two to three hours per week. Learners will observe and document how working professionals manage their responsibilities, and handle the day-to-day issues of the workplace. Learners may perform tasks while under the supervision of the leaders and provide weekly reports tying the experiences to the Organizational Leadership Program topics.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (196-100) and (196-154) and (196-157) and (196-140) and (196-155) and (196-161) and (196-158) and (196-153) and (196-162) and (196-156) and (196-159) and (196-163) and (116-102) and (116-168)

Complete Course Listing

**196-168 Organizational Development****Credits:** 3

This course introduces the Human Resources student to the different motivational mechanics that affect individuals, teams and organizations. Focus is placed on understanding individual differences and how they are manifested within an organization. Students will practice methods to improve communication and managing conflicts that occur at different levels within an organization.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-190 Leadership Development****Credits:** 3

Designed to assist individuals to apply leadership skills effectively in any organizational structure. Emphasis is placed on leadership and employee involvement strategies. Focus is on the role of the supervisor in defining direction, aligning the organization, empowering people and teams, modeling trustworthiness, balancing the needs of all stakeholders, and optimizing the allocation resources.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-191 Supervisor as Leader****Credits:** 3

As Organizations reduce management levels, the frontline supervisor will become a major component in effective delivery of products and services maximizing organizational results. This course is designed to help participants identify and develop personal leadership style and the skills necessary to effectively lead the work of others within the structure of an organization. Emphasis is placed on leading teams, communication and decision-making, managing conflict, supporting innovative thinking, influencing organizational culture, employee development, performance management and related topics that affect the leaders' role in the organization.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-192 Managing For Quality****Credits:** 3

Examines the role of the supervisor in assisting an organization to produce a quality product or service. The meaning and benefits of quality, the cost of quality systems, how to interact with customers, and data collection tools for continuous improvement will be explored.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-193 Human Resource Management****Credits:** 3

Establishes a foundation for development of employee effectiveness by focusing on the supervisor's role in understanding, communicating, and implementing organizational policies. Focus is placed on: employee hiring; orientation and training; performance management; motivating employees and related topics that affect the supervisor's work group.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**196-195 Leading Change with Assessment****Credits:** 3

The course is designed to teach instructional staff how to enhance their teaching by using core ability rubrics for assessing and improving student learning. Student/instructors will use BTC and other rubrics to assess learning artifacts. Then they will analyze the data to begin to develop a plan for improvement of student learning.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Surgical Technology (512)

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**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****512-125 Introduction to Surgical Technology****Credits:** 4

Provides the foundational knowledge of the occupational environment. Principles of sterilization and disinfection are learned. Surgical instruments are introduced. Preoperative patient care concepts are simulated. Lab practice is included.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (806-177)**Co-requisites:** (501-101)

Complete Course Listing

**512-126 Surgical Technology Fundamentals 1****Credits:** 4

Focuses on preparing the patient and operating room for surgery. Principles of sterile technique are emphasized as the student moves into the scrub role. Lab practice is included.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (806-177) and (501-101)**Co-requisites:** (512-125)

Complete Course Listing



**512-127 Exploring Surgical Issues****Credits:** 2

Explores a variety of issues related to surgical technology. Emphasis is placed on becoming a professional member of the surgical team.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (512-125) and (512-126)

Complete Course Listing

**512-128 Surgical Technology Fundamentals 2****Credits:** 4

Focuses on enhancing surgical technology skills while functioning as a sterile team member. Lab is included.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (501-101) and (806-179) and (512-127)**Co-requisites:** (806-197) and (512-129) and (512-130)

Complete Course Listing

**512-129 Surgical Pharmacology****Credits:** 2

Basic study of drug classifications, care, and handling of drugs and solutions, application of mathematical principles in dosage calculations, terminology related to pharmacology, anesthesia, and drugs used in surgery.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (512-127 and 806-179)**Co-requisites:** 806-197 and 512-128 and 512-130)

Complete Course Listing

**512-130 Surgical Skills Application****Credits:** 2

Provides a transition from the academic to the clinical setting. Learners integrate the surgical technologist skills as they apply to various surgical procedures.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (512-127 and 806-179)**Co-requisites:** 806-197 and 512-129 and 512-128)

Complete Course Listing

**512-131 Surgical Interventions 1****Credits:** 4

Provides the foundational knowledge of surgical core and specialty procedures. Examines the pathophysiology, diagnostic interventions, health sciences, and surgical techniques for a variety of procedures.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (512-130 and 806-197)**Co-requisites:** 512-132 and 512-133)

Complete Course Listing

**512-132 Surgical Technology Clinical 1****Credits:** 3

Apply basic surgical theories, principles, and procedural techniques in the operating room. Students begin to function as team members under the guidance of the instructor and authorized clinical personnel.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (512-130 and 806-197)**Co-requisites:** 512-131 and 512-133)

Complete Course Listing

**512-133 Surgical Technology Clinical 2****Credits:** 3

Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (512-130 and 806-197)**Co-requisites:** 512-132 and 512-131)

Complete Course Listing

**512-135 Surgical Technology Clinical 3****Credits:** 3

Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (512-133)**Co-requisites:** 512-142 and 512-136)

Complete Course Listing

**512-136 Surgical Technology Clinical 4****Credits:** 3

During this clinical course the student will function relatively independently. Serves as a transition from a student perspective to an employee by utilizing advanced skills for an entry level Surgical Technologist.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (512-133)**Co-requisites:** 512-142 and 512-135)

Complete Course Listing

**512-142 Surgical Interventions 2****Credits:** 4

Expands knowledge of core and specialty surgical procedures by incorporating pathophysiology, diagnostic interventions, health sciences, and surgical techniques.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (512-133)**Co-requisites:** 512-135 and 512-136)

Complete Course Listing

## Technical Communications (699)

Information provided includes course descriptions by subject only.

For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**699-122 Practicum in Technical Comm****Credits:** 3

The course fulfills a course requirement in the Technical Studies (AAS Only) component of the Technical Communications program. This course provides practical experience working as a technical writer. Students will be assigned to work with, and learn from, an area employer. Specific tasks and focuses will be tailored to the interests of the student and the needs of area employers. Evaluation of the student's performance will be a cooperative effort between the employer and the instructor.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (699-101) and (699-110) and (699-112) and (699-114) and (699-116)

Complete Course Listing

## Welding (442)

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**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).****442-100 Pipe Welding - Prep****Credits:** 1

This course covers varies ways to cut and bevel pipe as well as proper cleaning, fitment and tacking techniques on various size and thicknesses of pipe.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-101 Pipe Welding - Shielded Metal Arc Welding 1****Credits:** 1

This class covers SMAW welding of 6" schedule 80 steel pipe. This will include welding open roots with E6010 and fill and cover passes using E7018 in a 1G position.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-103 Pipe Welding - Shielded Metal Arc Welding 3****Credits:** 1

This class covers SMAW welding of 6" schedule 80 steel pipe. This will include welding open roots with E6010 and fill and cover passes using E7018 in a 2G position.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-102)

Complete Course Listing

**442-104 Pipe Welding - Shielded Metal Arc Welding 4****Credits:** 1

This class covers SMAW welding of 6" schedule 80 steel pipe. This will include welding open roots with E6010 and fill and cover passes using E7018 in a 6G position.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-103 or 420-134)

Complete Course Listing

**442-105 Pipe Welding - Gas Tungsten Arc Welding 1****Credits:** 1

This class covers GTAW welding of 6" schedule 40 steel pipe. This will include welding open roots, fill and cover passes using the cup walking technique in a 1G position.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-106 Pipe Welding - Gas Tungsten Arc Welding 2****Credits:** 1

This class covers GTAW welding of 6" schedule 40 steel pipe. This will include welding open roots, fill and cover passes using the cup walking technique in a 5G position.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-105)

Complete Course Listing

**442-107 Pipe Welding - Gas Tungsten Arc Welding 3****Credits:** 1

This class covers GTAW welding of 6" schedule 40 steel pipe. This will include welding open roots, fill and cover passes using the cup walking technique in a 2G position.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (442-106)

Complete Course Listing

**442-108 Pipe Welding - Gas Tungsten Arc Welding 4****Credits:** 1

This class covers GTAW welding of 6" schedule 40 steel pipe. This will include welding open roots, fill and cover passes using the cup walking technique in a 2G position.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-109 Mechanics of Learning for Welding****Credits:** 1

This course provides learners with strategies to develop study skills for success in college and the Welding Program. Through hands-on experience, learners apply study skills, learn how to think critically, and use information resources and technology. Focus will be on the use of college resources, goal setting, time management, flexible learning success strategies, and BTC Welding Program processes and procedures. Students will complete this course prior to starting other program welding courses.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-116 Welding Metal Fabrication****Credits:** 1

This course is designed to provide students with the knowledge and skills required to fabricate simple projects or parts of a project found on engineering drawings. The use and care of fabricating tools, along with safety, is stressed.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (442-113)

Complete Course Listing

**442-117 Welding Metal Fabrication 2****Credits:** 1

This course is designed to teach proper layout, fitment and tacking of complex projects found on engineering drawings. Students will assemble advanced weldments and use welding skills learned in previous welding classes to build those weldments in position and within tolerances listed on the drawing.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (442-116)

Complete Course Listing

**442-118 GTAW Stainless Steel 1****Credits:** 1

This course covers GTAW, equipment, consumables and machine settings in addition to producing groove and fillet welding of stainless steel in the flat position using GTAW. Emphasis is put on welding safety and common joint identification.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-119 GTAW Stainless Steel 2****Credits:** 1

This course covers groove and fillet welding of stainless steel in the horizontal position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-120 GTAW Stainless Steel 3****Credits:** 1

This course covers groove and fillet welding of stainless steel in the vertical position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-121 GTAW Stainless Steel 4****Credits:** 1

This course covers groove and fillet welding of stainless steel in the overhead position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-122 GTAW Stainless Steel 5****Credits:** 1

This course covers fillet welding of stainless steel pipe and pipe to plate in the 1F, 2F and 5F position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-123 GTAW Stainless Steel 6****Credits:** 1

This course uses skills developed in previous GTAW stainless steel courses and fabrication courses to produce a project made from stainless steel by following a blueprint.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-124 GTAW Pipe Welding 1 – Stainless Steel****Credits:** 1

This course covers equipment, consumables and machine settings needed to produce welds in Schedule 40 stainless steel pipe. Students will learn to produce groove welds on schedule 40 stainless steel pipe in the 1G position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-125 GTAW Pipe Welding 2 – Stainless Steel****Credits:** 1

This course will teach students to produce groove welds on schedule 40 stainless steel pipe in the 2G position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-126 GTAW Pipe Welding 3 – Stainless Steel****Credits:** 1

This course will teach students to produce groove welds on schedule 40 stainless steel pipe in the 5G position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-127 GTAW Pipe Welding 4 – Stainless Steel****Credits:** 1

This course will teach students to produce groove welds on schedule 40 stainless steel pipe in the 6G position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-128 GTAW Stainless Sanitary Tube Welding 1****Credits:** 1

This course covers equipment, consumables and machine settings needed to produce welds in stainless steel sanitary tubing. Students will learn to produce groove welds on .065" wall stainless steel tubing with no filler metal in the 1G position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-129 GTAW Stainless Sanitary Tube Welding 2****Credits:** 1

This course will teach students to produce groove welds on .065" wall stainless steel tubing with no filler metal in the 2G position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-130 GTAW Stainless Sanitary Tube Welding 3****Credits:** 1

This course will teach students to produce groove welds on .065" wall stainless steel tubing with no filler metal in the 5G position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-131 GTAW Stainless Sanitary Tube Welding 4****Credits:** 1

This course will teach students to produce groove welds on .065" wall stainless steel tubing with no filler metal in the 6G position using GTAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-132 GMAW Stainless Steel 1****Credits:** 1

This course covers GMAW, equipment, consumables and machine settings in addition to producing groove and fillet welding of stainless steel in the flat position using GMAW. Emphasis is put on welding safety and common joint identification.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-133 GMAW Stainless Steel 2****Credits:** 1

This course covers groove and fillet welding of stainless steel in the horizontal position using GMAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-134 GMAW Stainless Steel 3****Credits:** 1

This course covers groove and fillet welding of stainless steel in the vertical position using GMAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-135 GMAW Stainless Steel 4****Credits:** 1

This course covers groove and fillet welding of stainless steel in the overhead position using GMAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-136 GMAW Stainless Steel 5****Credits:** 1

This course covers fillet welding of stainless steel pipe and pipe to plate in the 1F, 2F and 5F position using GMAW.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-137 GMAW Stainless Steel 6****Credits:** 1

This course uses skills developed in previous GMAW stainless steel courses and fabrication courses to produce a project made from stainless steel by following a blueprint.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-139 Metal Finishing-General Fabrication****Credits:** 1

This course covers metal finishing that occurs after welding. Students will learn to identify grades of finishes as well as the proper equipment needed to achieve those finishes. Students will learn to finish welds mechanically with hand held power tools.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-140 Metal Finishing-Food Grade****Credits:** 1

This course covers metal finishing that occurs after welding in the food industry. Students will learn to identify grades of finishes as well as the proper equipment needed to achieve those finishes. Students will learn to finish welds mechanically with hand held power tools to achieve finishes that are acceptable by food grade standards.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**442-142 Introduction to Welding****Credits:** 1

The introduction to welding course will introduce students to the history of welding, basic metallurgy, weld defects and discontinuities, codes and standards and common welding processes and practices.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (620-165 or 442-141 or 442-317 or 449-425 or 412-473)

Complete Course Listing

**442-143 Shielded Metal Arc Welding 1****Credits:** 1

This course examines the theory and operation of Shielded Metal Arc Welding (SMAW). Safety protocols are reviewed and practiced. Proper machine settings and common filler metals are used to produce flat position welds on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-318 or 442-142)

Complete Course Listing

**442-144 Shielded Metal Arc Welding 2****Credits:** 1

This course examines the theory and operation of Shielded Metal Arc Welding (SMAW). Safety protocols are reviewed and practiced. Proper machine settings and common filler metals are used to produce horizontal position welds on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-336 or 442-143)

Complete Course Listing

**442-145 Shielded Metal Arc Welding 3****Credits:** 1

This course examines the theory and operation of Shielded Metal Arc Welding (SMAW). Safety protocols are reviewed and practiced. Proper machine settings and common filler metals are used to produce vertical position welds on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-337 or 442-144)

Complete Course Listing

**442-146 Shielded Metal Arc Welding 4****Credits:** 1

This course examines the theory and operation of Shielded Metal Arc Welding (SMAW). Safety protocols are reviewed and practiced. Proper machine settings and common filler metals are used to produce overhead position welds on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-338 or 442-145)

Complete Course Listing

**442-147 Shielded Metal Arc Welding 5****Credits:** 1

This course applies the theory and operation of Shielded Metal Arc Welding (SMAW) learned in prior courses through completion of projects. Safety protocols are reviewed and practiced.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-339 or 442-146)

Complete Course Listing

**442-148 Flux Cored Arc Welding 1****Credits:** 1

This course examines the theory and practical operation of Flux Cored Arc Welding (FCAW). Safety protocols are reviewed and practiced. Proper machine settings and filler metals are used to produce flat position welds on carbon steel using Gas Shielded and Self Shielded FCAW.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-118 or 442-142)

Complete Course Listing

**442-149 Flux Cored Arc Welding 2****Credits:** 1

This course examines the theory and practical operation of Flux Cored Arc Welding (FCAW). Safety protocols are reviewed and practiced. Proper machine settings and filler metals are used to produce horizontal position welds on carbon steel using Gas Shielded and Self Shielded FCAW.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-331 or 442-148)

Complete Course Listing

**442-150 Flux Cored Arc Welding 3****Credits:** 1

This course examines the theory and practical operation of Flux Cored Arc Welding (FCAW). Safety protocols are reviewed and practiced. Proper machine settings and filler metals are used to produce vertical position welds on carbon steel using Gas Shielded and Self Shielded FCAW.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-332 or 442-149)

Complete Course Listing

**442-151 Flux Cored Arc Welding 4****Credits:** 1

This course examines the theory and practical operation of Flux Cored Arc Welding (FCAW). Safety protocols are reviewed and practiced. Proper machine settings and filler metals are used to produce overhead position welds on carbon steel using Gas Shielded and Self Shielded FCAW.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-333 or 442-150)

Complete Course Listing

**442-152 Flux Cored Arc Welding 5****Credits:** 1

This course applies the theory and operation of Flux Cored Arc Welding (FCAW) learned in prior courses through completion of projects. Safety protocols are reviewed and practiced.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-334 or 442-151)

Complete Course Listing

**442-153 Welding Blueprint Reading 1****Credits:** 1

This course covers blueprint reading specific to the welding industry. Students examine and define welding symbols and abbreviations used on welding specific blueprints.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-318 or 442-109)

Complete Course Listing

**442-154 Thermal Cutting****Credits:** 1

Students will perform oxy-fuel cutting set up and operations, line burner operation, plasma cutting operations, carbon arc cutting and gouging and coupon preparations used for practice and testing.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-318 or 442-142)

Complete Course Listing

**442-155 Gas Metal Arc Welding 1****Credits:** 1

This course examines Gas Metal Arc Welding (GMAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make welds in the flat position on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-343 or 442-142)

Complete Course Listing

**442-156 Gas Metal Arc Welding 2****Credits:** 1

This course examines Gas Metal Arc Welding (GMAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make welds in the horizontal position on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-320 or 442-155)

Complete Course Listing

**442-157 Gas Metal Arc Welding 3****Credits:** 1

This course examines Gas Metal Arc Welding (GMAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make welds in the vertical position on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-321 or 442-156)

Complete Course Listing

**442-158 Gas Metal Arc Welding 4****Credits:** 1

This course examines Gas Metal Arc Welding (GMAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make welds in the overhead position on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-322 or 442-157)

Complete Course Listing

**442-159 Gas Metal Arc Welding 5****Credits:** 1

This course examines Pulsed Gas Metal Arc Welding (GMAW-P) machine settings, theory, filler metals, safety protocol and welding process.

Students will make welds in the flat position on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-323 or 442-158)

Complete Course Listing

**442-160 Gas Metal Arc Welding 6****Credits:** 1

This course examines Pulsed Gas Metal Arc Welding (GMAW-P) machine settings, theory, filler metals, safety protocol and welding process.

Students will make welds in the horizontal and vertical positions on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-324 or 442-159)

Complete Course Listing

**442-161 Gas Tungsten Arc Welding 1****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process.

Students will make flat position welds on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-318 or 442-142)

Complete Course Listing

**442-162 Gas Tungsten Arc Welding 2****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process.

Students will make horizontal position welds on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-326 or 442-161)

Complete Course Listing

**442-163 Gas Tungsten Arc Welding 3****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process.

Students will make vertical position welds on carbon steel.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-327 or 442-162)

Complete Course Listing

**442-164 Gas Tungsten Arc Welding 4****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process.

Students will make flat and horizontal position welds on aluminum.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-328 or 442-163)

Complete Course Listing

**442-165 Gas Tungsten Arc Welding 5****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process.

Students will make vertical position welds on aluminum.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-329 or 442-164)

Complete Course Listing

**442-166 Welding Certification****Credits:** 1

This course covers destructive and non-destructive testing methods and welding procedure creation and implementation as it relates to welding code work. Participants will write a procedure, fabricate, weld and test two pre-qualified specimens in accordance with a specified welding code.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-330 or 442-165) and (442-335 or 442-152) and (442-340 or 442-147) and (442-325 or 442-160)

Complete Course Listing

**442-167 Advanced Welding Techniques****Credits:** 1

Students construct various welding projects in accordance with the American Welding Society (AWS) SENCE program and EG2.0.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-341 or 442-166)

Complete Course Listing

**442-168 Welding Blueprint Reading 2****Credits:** 1

This course covers the fundamentals of Blueprint reading. Students examine and analyze types of drawings, orthographic projection, library of lines, title block dimensions and produce sketching projects.

**Aid Code:** 10 - Associate Degree.**Co-requisites:** (442-343 or 442-153)

Complete Course Listing

**442-169 FCAW-G and GMAW-S Welding****Credits:** 1

This course examines Gas Metal Arc Welding Short Circuit Transfer and Flux Cored Arc Welding with Gas Shielding machine settings, theory, filler metals, polarities, safety protocol and welding processes. Students will make welds in the flat position on carbon steel.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing



**442-170 Pipe Welding – GMAW-S and FCAW-G****Credits:** 1

This class covers welding of 6" schedule 80 steel pipe with GMAW-S root passes and FCAW-G fill and cover passes in the 1 G position.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

**442-171 Pipe Welding - GTAW and SMAW****Credits:** 1

This class covers GTAW and SMAW welding of 2" and 6" steel pipe. This will include welding open roots, fill and cover passes in various positions.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

**442-307 Gas Metal Arc Welding (GMAW)****Credits:** 5

This is an introductory course designed for students who desire to learn the theories and skills of welding. The theoretical principals learned in Welding Processes & Safety are put into practice. Students will learn to make sound welds with the Gas Metal Arc process (GMAW) on mild steel in all positions using short circuiting transfer mode. Students will also make sound welds in the Spray Transfer Mode on mild steel in the flat and horizontal positions. Industry standards and codes will be explored as visual and destructive testing of welded samples are carried out by students as an introduction to aspects of weld quality assurance and weld quality control. Health hazards and safety rules are discussed along with grinding, shearing, joint design and welding certification procedures.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Welding Program.

**Co-requisites:** (804-306)

[Complete Course Listing](#)

**442-308 Flux Cored Arc Welding (FCAW)****Credits:** 5

This is an introductory course designed for students who desire to learn the theories and skills of welding. The theoretical principals learned in Welding Processes & Safety are put into practice. Students will learn to make sound welds with the Flux Cored Arc Welding process (FCAW) and Metal Cored Arc Welding Process (MCAW) on mild steel in all positions using short circuiting, spray and semi-spray transfer modes. Industry standards and codes will be explored as visual and destructive testing of welded samples are carried out by students as an introduction to aspects of weld quality assurance and weld quality control. Health hazards and safety rules are discussed along with grinding, shearing, joint design and welding certification procedures. Library research, written assignments and tests, and basic metallurgy and certification preparation are all units of instruction involved in the above areas.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Welding Program.

**Co-requisites:** (804-306)

[Complete Course Listing](#)

**442-310 Shielded Metal Arc Weld (SMAW)****Credits:** 5

This is an introductory course designed for students who desire to learn the theories and skills of welding. The theoretical principals learned in Industrial Welding Procedures-Codes & Specifications are put into practice. Students will learn to make sound welds with the Shielded Metal Arc Welding Process (SMAW) on mild steel in all positions with non low hydrogen electrodes such as E6010, E6011, E6013, and E7014. Health hazards and safety rules are discussed along with metal weldability, electrode classification and weld inspection. Industry standards and codes will be explored as visual and destructive testing of welded samples are carried out by students as an introduction to aspects of weld quality assurance and weld quality control. Library research, written assignments and tests, and basic metallurgy and certification preparation are all units of instruction involved in the above areas.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Welding Program.

**Co-requisites:** (804-306) and (801-311)

[Complete Course Listing](#)

**442-312 Gas Tungsten Arc Weld (GTAW)****Credits:** 5

This is an introductory course designed for students who desire to learn the theories and skills of welding. The theoretical principals learned in Industrial Welding Procedures - Codes & Specifications are put into practice. Students will learn to make sound welds with the Gas Tungsten Arc Welding Process (GTAW) on mild steel, stainless steel and aluminum alloys. Industry standards and codes will be explored as visual and destructive testing of welded samples are carried out by students as an introduction to aspects of weld quality assurance and weld quality control. Health hazards and safety rules are discussed along with weldability, tungsten electrode selection, shielded gasses, grinding, shearing, joint design and welding certification procedures. Library research, written assignments and tests, basic metallurgy and certification preparation are all units of instruction involved in the above areas.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Welding Program.

**Co-requisites:** (804-306) and (801-311)

[Complete Course Listing](#)

**442-315 Metal Fabrication-Structural****Credits:** 3

This course is designed to include basic light and heavy duty structural steel fabrication skills. The class will link the student's understanding of welding processes with real world fabrication techniques used in the industry today. The class will introduce a variety of skills needed to perform in today's fast pace and highly skilled work force that will include, tools of the trade, measuring, cutting and bolting principals, layout and design, drilling, bending, shaping and actual construction of light and heavy duty structural steel projects. This class will also involve exposure to riveting, automated CNC cutting equipment, basic manufacturing principals, and promotion of teamwork and communication skills as learners. Students will design, layout, and fabricate real projects.

**Aid Code:** 31 - One-year Technical Diploma.

**Restrictions:** Restricted to students admitted to Welding Program.

**Co-requisites:** (442-307 or 442-308 or 442-310 or 442-312)

[Complete Course Listing](#)

**442-316 Metal Fabrication-Sheet Metal****Credits:** 3

This course is designed to introduce the basic skills involved in the sheet metal fabrication industry. The class will involve design and layout, tools of the trade, measuring and location techniques, forming and "shaping" of sheet metal. The class will involve specialty equipment used in the aviation industry, the custom auto and motorcycle industry, food industry and other specialty sheet metal industries. This class will also include exposure to fastener types, riveting, CNC cutting equipment, and promotion of teamwork and communication skills required in this highly skilled industry. Some of the specialty tools presented will include English wheels, Shot bag and mallets, shrinking and stretching equipment, bead rollers and hammer's and dollies, the Pullmax machine and the techniques used with them. Students will design, layout and construct real sheet metal projects in groups and individually.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-307 or 442-308 or 442-310 or 442-312)

Complete Course Listing

**442-317 Welding Shop Safety****Credits:** 1

This course will familiarize students with all necessary national safety rules and regulations of the welding industry, in addition to personal protective equipment and machine operation.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**442-318 Introduction to Welding****Credits:** 1

The introduction to welding course will introduce students to the history of welding, basic metallurgy, weld defects and discontinuities, codes and standards and common welding processes and practices.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-317 or 412-124 or 412-305 or 620-164)

Complete Course Listing

**442-320 Gas Metal Arc Welding 1****Credits:** 1

This course examines Gas Metal Arc Welding (GMAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make welds in the flat position on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-343)

Complete Course Listing

**442-321 Gas Metal Arc Welding 2****Credits:** 1

This course examines Gas Metal Arc Welding (GMAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make welds in the horizontal position on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-320)

Complete Course Listing

**442-322 Gas Metal Arc Welding 3****Credits:** 1

This course examines Gas Metal Arc Welding (GMAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make welds in the vertical position on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-321)

Complete Course Listing

**442-323 Gas Metal Arc Welding 4****Credits:** 1

This course examines Gas Metal Arc Welding (GMAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make welds in the overhead position on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-322)

Complete Course Listing

**442-324 Gas Metal Arc Welding 5****Credits:** 1

This course examines Pulsed Gas Metal Arc Welding (GMAW-P) machine settings, theory, filler metals, safety protocol and welding process. Students will make welds in the flat position on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-323)

Complete Course Listing

**442-325 Gas Metal Arc Welding 6****Credits:** 1

This course examines Pulsed Gas Metal Arc Welding (GMAW-P) machine settings, theory, filler metals, safety protocol and welding process. Students will make welds in the horizontal and vertical positions on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-324)

Complete Course Listing

**442-326 Gas Tungsten Arc Welding 1****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make flat position welds on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-343)

Complete Course Listing

**442-327 Gas Tungsten Arc Welding 2****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make horizontal position welds on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-326)

Complete Course Listing

**442-328 Gas Tungsten Arc Welding 3****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make vertical position welds on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-327)

Complete Course Listing

**442-329 Gas Tungsten Arc Welding 4****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make flat and horizontal position welds on aluminum.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-328)

Complete Course Listing

**442-330 Gas Tungsten Arc Welding 5****Credits:** 1

This course covers Gas Tungsten Arc Welding (GTAW) machine settings, theory, filler metals, polarities, safety protocol and welding process. Students will make vertical position welds on aluminum.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-329)

Complete Course Listing

**442-331 Flux Cored Arc Welding 1****Credits:** 1

This course examines the theory and practical operation of Flux Cored Arc Welding (FCAW). Safety protocols are reviewed and practiced. Proper machine settings and filler metals are used to produce flat position welds on carbon steel using Gas Shielded and Self Shielded FCAW.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-318)

Complete Course Listing

**442-332 Flux Cored Arc Welding 2****Credits:** 1

This course examines the theory and practical operation of Flux Cored Arc Welding (FCAW). Safety protocols are reviewed and practiced. Proper machine settings and filler metals are used to produce horizontal position welds on carbon steel using Gas Shielded and Self Shielded FCAW.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-331)

Complete Course Listing

**442-333 Flux Cored Arc Welding 3****Credits:** 1

This course examines the theory and practical operation of Flux Cored Arc Welding (FCAW). Safety protocols are reviewed and practiced. Proper machine settings and filler metals are used to produce vertical position welds on carbon steel using Gas Shielded and Self Shielded FCAW.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-332)

Complete Course Listing

**442-334 Flux Cored Arc Welding 4****Credits:** 1

This course examines the theory and practical operation of Flux Cored Arc Welding (FCAW). Safety protocols are reviewed and practiced. Proper machine settings and filler metals are used to produce overhead position welds on carbon steel using Gas Shielded and Self Shielded FCAW.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-333)

Complete Course Listing

**442-335 Flux Cored Arc Welding 5****Credits:** 1

This course applies the theory and operation of Flux Cored Arc Welding (FCAW) learned in prior courses through completion of projects. Safety protocols are reviewed and practiced.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-334)

Complete Course Listing

**442-336 Shielded Metal Arc Welding 1****Credits:** 1

This course examines the theory and operation of Shielded Metal Arc Welding (SMAW). Safety protocols are reviewed and practiced. Proper machine settings and common filler metals are used to produce flat position welds on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-318)

Complete Course Listing

**442-337 Shielded Metal Arc Welding 2****Credits:** 1

This course examines the theory and operation of Shielded Metal Arc Welding (SMAW). Safety protocols are reviewed and practiced. Proper machine settings and common filler metals are used to produce horizontal position welds on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-336)

Complete Course Listing

**442-338 Shielded Metal Arc Welding 3****Credits:** 1

This course examines the theory and operation of Shielded Metal Arc Welding (SMAW). Safety protocols are reviewed and practiced. Proper machine settings and common filler metals are used to produce vertical position welds on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-337)

Complete Course Listing

**442-339 Shielded Metal Arc Welding 4****Credits:** 1

This course examines the theory and operation of Shielded Metal Arc Welding (SMAW). Safety protocols are reviewed and practiced. Proper machine settings and common filler metals are used to produce overhead position welds on carbon steel.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-338)

Complete Course Listing

**442-340 Shielded Metal Arc Welding 5****Credits:** 1

This course applies the theory and operation of Shielded Metal Arc Welding (SMAW) learned in prior courses through completion of projects. Safety protocols are reviewed and practiced.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-339)

Complete Course Listing

**442-341 Welding Certification****Credits:** 1

This course covers destructive and non-destructive testing methods and welding procedure creation and implementation as it relates to welding code work. Participants will write a procedure, fabricate, weld and test two pre-qualified specimens in accordance with a specified welding code.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-325) and (442-330) and (442-335) and (442-340)

Complete Course Listing

**442-342 Advanced Welding Techniques****Credits:** 1

Students construct various welding projects in accordance with the American Welding Society (AWS) SENCE program and EG2.0.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-341)

Complete Course Listing

**442-343 Welding Blueprint Reading 1****Credits:** 1

This course covers the fundamentals of Blueprint reading. Students examine and analyze types of drawings, orthographic projection, library of lines, title block dimensions and produce sketching projects.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-318)

Complete Course Listing

**442-344 Welding Blueprint Reading 2****Credits:** 1

This course covers blueprint reading specific to the welding industry. Students examine and define welding symbols and abbreviations used on welding specific blueprints.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-343)

Complete Course Listing

**442-345 Structural Fab Welding 1****Credits:** 1

This course covers the fundamentals of structural steel fabrication for the welding industry. Included in this course is safety, introduction to structural fabrication equipment and techniques.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** (442-319)

Complete Course Listing

**442-352 Thermal Cutting****Credits:** 1

Students will perform oxy-fuel cutting set up and operations, line burner operation, plasma cutting operations, carbon arc cutting and gouging and coupon preparations used for practice and testing.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (442-318)

Complete Course Listing

**442-510 Welding Plumbers****Credits:** 1**Aid Code:** 50 - Apprentice.

Complete Course Listing

**442-511 Print Reading, Math, Cutting & Inspection****Credits:** 2

The program configuration model for the Welder Fabricator apprenticeship related instruction provides xx semesters of coursework and the Transition-to-Trainer course in the last year. Courses listed here were developed by instructors and subject matter experts from industry. Each semester includes 72 hours of instruction (4 hours per week, or the equivalent, each term).

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**442-513 Advanced Fabrication and Layout with Soldering and Brazing****Credits:** 2

The program configuration model for the Welder Fabricator apprenticeship related instruction provides xx semesters of coursework and the Transition-to-Trainer course in the last year. Courses listed here were developed by instructors and subject matter experts from industry. Each semester includes 72 hours of instruction (4 hours per week, or the equivalent, each term).

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**442-515 Welding & Fabrication Troubleshooting****Credits:** 2

The program configuration model for the Welder Fabricator apprenticeship related instruction provides xx semesters of coursework and the Transition-to-Trainer course in the last year. Courses listed here were developed by instructors and subject matter experts from industry. Each semester includes 72 hours of instruction (4 hours per week, or the equivalent, each term).

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**442-522 Layout & Fabrication Basics with SMAW and GMAW Welding****Credits:** 2

The program configuration model for the Welder Fabricator apprenticeship related instruction provides xx semesters of coursework and the Transition-to-Trainer course in the last year. Courses listed here were developed by instructors and subject matter experts from industry. Each semester includes 72 hours of instruction (4 hours per week, or the equivalent, each term).

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**442-524 Metallurgy & FCAW and GTAW Welding****Credits:** 2

The program configuration model for the Welder Fabricator apprenticeship related instruction provides xx semesters of coursework and the Transition-to-Trainer course in the last year. Courses listed here were developed by instructors and subject matter experts from industry. Each semester includes 72 hours of instruction (4 hours per week, or the equivalent, each term).

**Aid Code:** 50 - Apprentice.

Complete Course Listing

**442-526 Introduction to Automation, CNC and Lean Manufacturing****Credits:** 2

The program configuration model for the Welder Fabricator apprenticeship related instruction provides xx semesters of coursework and the Transition-to-Trainer course in the last year. Courses listed here were developed by instructors and subject matter experts from industry. Each semester includes 72 hours of instruction (4 hours per week, or the equivalent, each term).

**Aid Code:** 50 - Apprentice.

Complete Course Listing

# GENERAL EDUCATION

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

## Communication Skills (801)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

### 801-119 Mass Communications

**Credits:** 3

This is a course designed for students who are interested in learning about music, radio, television, and film. However, the nature and scope of the course goes beyond mere media appreciation. The overall objective is to provide students with an understanding of the forms of Mass Communication and insure that the students learn how to communicate interpersonally about the films, television shows, and radio music that they see and hear. Main learning activities: movies, recorded music and television shows will be seen and heard regularly in class and discussed and critiqued formally outside of class.

**Aid Code:** 10 - Associate Degree.

[Complete Course Listing](#)

### 801-136 English Composition 1

**Credits:** 3

This course is designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students will analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals will develop critical reading skills through analysis of written documents.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Writing Skills, 44 or COMPASS Writing Skills, 070 or AccuPlacer Sentence Skills, 083 or ACT English, 18 or Next Gen AccuPlacer Writing, 255 or SAT Writing, 330 or Writing-Credit Level Met or Test Waived-College Degree or 831-103 or 831-103) and (COMPASS Reading Skills, 073 or AccuPlacer Reading Comp, 076 or ACT Reading, 16 or ASSET Reading Skills, 39 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** 851-795 or (838-104

[Complete Course Listing](#)

### 801-195 Written Communication

**Credits:** 3

Develops writing skills which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through the analysis of a variety of written documents.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Writing Skills, 44 or COMPASS Writing Skills, 070 or ACT English, 18 or AccuPlacer Sentence Skills, 083 or Next Gen AccuPlacer Writing, 255 or SAT Writing, 330 or Writing-Credit Level Met or Test Waived-College Degree or 831-103 or 831-103) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 260 or Reading-Credit Level Met or Test Waived-College Degree or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

**Co-requisites:** 851-795) or 838-104 or 838-104

[Complete Course Listing](#)

### 801-196 Oral/Interpersonal Communication

**Credits:** 3

Focuses upon developing speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities, and other projects.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or SAT Reading, 330 or AccuPlacer Reading Comp, 076 or Reading-Credit Level Met or Next Gen AccuPlacer Reading, 250 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

[Complete Course Listing](#)

### 801-197 Technical Reporting

**Credits:** 3

The student will prepare and present oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (801-195 or 801-136 or Test Waived-College Degree)

[Complete Course Listing](#)



**801-198 Speech****Credits:** 3

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of the course.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 260 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**801-311 Communication****Credits:** 2

This course reviews the grammar and writing skills that an adult learner needs to write clearly, concisely, and persuasively on the job. Students will produce a variety of job-related documents such as: business memos, letters, and short reports. The course will provide techniques that will improve the effectiveness with which learners communicate interpersonally, and within small groups. Students will learn to prepare and deliver oral presentations.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

## Elective (999)

**999-888 Orientation Demo****Credits:** 0**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**999-900 Elective****Credits:** 3

Complete Course Listing

**999-902 Elective****Credits:** 3

Complete Course Listing

**999-997 Elective****Credits:** 2

2 credit elective.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**999-998 General Education Elective****Credits:** 3

Complete Course Listing

**999-999 Elective****Credits:** 3**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## Mathematics (804)

**Information provided includes course descriptions by subject only.****For complete 2020-2021 programs/academic plans, please refer to**

Academic Programs (p. 22).

**804-107 College Mathematics****Credits:** 3

This course is designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between U.S. and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or Test Waived-College Degree or 834-109 or 834-109) or (AccuPlacer Arithmetic, 089 or (AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030))

Complete Course Listing

**804-113 College Technical Mathematics 1A****Credits:** 3

Topics include: solving linear, quadratic, and rational equations; graphing; formula rearrangement; solving systems of equations; percent; proportions; and operations on polynomials. Emphasis will be on the applications of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 45 or Compass Algebra, 046 or ACT Math, 20 or 804-110 or 834-110 or (AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 050) or SAT Mathematics, 390) or (Next Gen AccuPlacer Arithmetic, 272 and Next Gen AccuPlacer QRAS, 243)

Complete Course Listing

**804-114 College Technical Mathematics 1B****Credits:** 2

This course is a continuation of College Technical Mathematics 1A. Topics include: measurement systems; computational geometry; right and oblique triangle trigonometry; and trigonometric functions on the unit circle. Emphasis will be on the application of skills to technical problems. Successful completion of or concurrent enrollment in College Technical Mathematics 1A is required for course enrollment. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** 804-113

Complete Course Listing

**804-115 College Technical Mathematics 1****Credits:** 5

Topics include: solving linear, quadratic, and rational equations; graphing; formula rearrangement; solving systems of equations; percent; proportions; measurement systems; computational geometry; right and oblique triangle trigonometry; trigonometric functions on the unit circle; and operations on polynomials. Emphasis will be on the application of skills to technical problems.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 45 or Compass Algebra, 046 or Next Gen AccuPlacer Arithmetic, 272) and (Next Gen AccuPlacer QRAS, 243) or (ACT Math, 20 or 804-110 or 834-110 or (AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 50))

Complete Course Listing

**804-118 Intermediate Algebra with Applications****Credits:** 4

This course offers algebra content with applications. Topics include properties of real numbers, order of operations, algebraic solution for linear equations and inequalities, operations with polynomial and rational expressions, operations with rational exponents and radicals, algebra of inverse, logarithmic and exponential functions.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 45 or Compass Algebra, 046 or ACT Math, 20 or 804-110 or 834-110 or AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 050) or (Next Gen AccuPlacer Arithmetic, 272 and Next Gen AccuPlacer QRAS, 243)

Complete Course Listing

**804-123 Math with Business Applications****Credits:** 3

This course covers...real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, apply math concepts to the purchasing/buying process, apply math concepts to the selling process, and basic statistics with business/consumer applications.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or 809-198 or 809-199 or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198) and (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or Test Waived-College Degree or 834-109 or 834-109) or (AccuPlacer Arithmetic, 089 or AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030) or (Next Gen AccuPlacer Arithmetic, 272) or (Next Gen AccuPlacer Arithmetic, 257 and Next Gen AccuPlacer QRAS, 210)

Complete Course Listing

**804-133 Math and Logic****Credits:** 3

Students will apply mathematical problem solving techniques. Topics will include symbolic logic, sets, algebra, Boolean algebra, and number bases.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or Test Waived-College Degree or 834-109 or 834-109) or (AccuPlacer Arithmetic, 089) or (AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or SAT Reading, 330 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree) or (838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**804-134 Mathematical Reasoning****Credits:** 3

All college students, regardless of their college major, need to be able to make reasonable decisions about fiscal, environmental, and health issues that require quantitative reasoning skills. An activity based approach is used to explore numerical relationships, graphs, proportional relationships, algebraic reasoning, and problem solving using linear, exponential and other mathematical models. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Test Waived-College Degree) and (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 44 or ACT Math, 17 or Test Waived-College Degree or AccuPlacer Arithmetic, 089) or SAT Mathematics, 390 or (AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030) or (Next Gen AccuPlacer Arithmetic, 272) or (Next Gen AccuPlacer Arithmetic, 257 and Next Gen AccuPlacer QRAS, 210) or (834-109) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104 or (854-805)

Complete Course Listing

**804-189 Introductory Statistics****Credits:** 3

Students taking Introductory Statistics display data with graphs, describe distributions with numbers perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 45 or Compass Algebra, 046 or ACT Math, 20 or 804-106 or 804-107 or 804-118 or 804-110 or 834-110) or (AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 050) or (Next Gen AccuPlacer Arithmetic, 272 and Next Gen AccuPlacer QRAS, 243)

Complete Course Listing

**804-195 College Algebra w Apps****Credits:** 3

This course covers those skills needed for success in Calculus and many application areas on a baccalaureate level. Topics include the real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinatorics, and the binomial theorem.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**804-196 Trigonometry w Apps****Credits:** 3

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles complex numbers, DeMoivre's Theorem, polar coordinates, and vectors.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 49 or Compass Algebra, 066 or ACT Math, 23 or 804-110)

Complete Course Listing

**804-198 Calculus 1****Credits:** 4

Analyze and graph algebraic expressions, especially conic sections. Develop an intuitive understanding of limits, derivatives and integrals. Apply the derivative and the integral to certain physical problems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**804-304 Mathematic Fundamentals****Credits:** 2

This course consists of instructional units that incorporate hands on activities and projects. It is intended to give students a review of the basic principles of arithmetic, including whole numbers, fractions, and decimals. Estimation of length, angles and mathematical results is also covered. Additional topics include ratios, proportions, powers, analyzing graphs and an introduction to algebra. Proper calculator usage will be discussed throughout the course.

**Aid Code:** 31 - One-year Technical Diploma.

**Pre-requisites:** (ASSET Numerical Skills, 35 or COMPASS Pre-Algebra Skills, 025 or ACT Math, 15 or AccuPlacer Arithmetic, 050 or Test Waived-College Degree or 854-781 or 854-781 or 854-782 or 854-782 or 854-783 or 854-783 or 854-784 or 854-784 or 854-785 or 854-785 or 854-786 or 854-786 or 854-787 or 854-787)

Complete Course Listing

**804-306 Shop Mathematics I****Credits:** 2

This course includes the basic principles of arithmetic beginning with whole numbers and common fractions, and continuing through decimals, percentages, ratios, proportions and averages, measurements, use of constants and coordinate systems. These principles are applied to typical shop problems throughout the course.

**Aid Code:** 31 - One-year Technical Diploma.

Complete Course Listing

**804-308 Shop Mathematics II****Credits:** 2

This course is a continuation of Shop Mathematics I and includes the study of the properties of circles, volumes and surface areas of various solids, an introduction to practical algebra and trigonometric principles used in solving right triangles as well as applications of the sine and cosine law in solving oblique triangles.

**Aid Code:** 31 - One-year Technical Diploma.**Pre-requisites:** 804-306

Complete Course Listing

**804-501 Math For Plumbing Appr****Credits:** 1**Aid Code:** 50 - Apprentice.

Complete Course Listing

## Natural Science (806)

**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
 Academic Programs (p. 22).

**806-108 Applied Anatomy and Physiology****Credits:** 5

This course builds on a basic knowledge of skeletal, muscle and nervous systems and presents an in-depth study of their structure and functions. The integration of these systems to produce motion is studied. Critical thinking skills are encouraged as to analyze the relationships of these systems to normal movement, posture and gait. The development of observation and palpation skills is emphasized. Independent study of the pathophysiology of the major body systems is also included.

**Aid Code:** 10 - Associate Degree.**Restrictions:** Restricted to students admitted to Physical Therapist Assistant Program.**Pre-requisites:** (806-154 or 806-139 or 806-140) and (806-177 or 806-131 or 806-195)

Complete Course Listing

**806-110 Forensic Science (Criminalistics)****Credits:** 3

Forensic Science is a course designed to provide students of law enforcement with an appreciation of the capabilities and limitations of scientific analysis of crime scene evidence. All functions of a basic crime lab are discussed with emphasis on relating methods of analysis to the proper collection and packaging of evidence. Laboratory exercises are designed to expand upon and reinforce lecture material.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or SAT Reading, 330 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)**Co-requisites:** (838-104

Complete Course Listing

**806-112 Principles of Sustainability****Credits:** 3

Prepares the student to develop sustainable literacy, analyze the interconnections among the physical and biological sciences and environmental systems, summarize the effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce the use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal and recycling in the U.S., and analyze approaches used by your community to promote and implement sustainability.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or AccuPlacer Reading Comp, 55 or Next Gen AccuPlacer Reading, 236)**Co-requisites:** (838-104

Complete Course Listing

**806-118 Metal Science****Credits:** 3

This is a one-semester course in basic physics and metallurgy principles for the Technical College student. The course reviews accuracy and precision of measurements, introduces calculations with units and conversions within and between systems of measurements, formula rearranging, and applications in problem solving. Basic topics include properties of matter, metallurgy, material properties, material testing, force, motion (linear and circular), energy, power, and simple machines. The topics of heat, electricity, and magnetism are also introduced in the class. Emphasis is placed on the application of the laws and principles of physics to practical problems found in the machine shop and industry.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (804-308) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Test Waived-College Degree or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)**Co-requisites:** (838-104

Complete Course Listing

**806-134 General Chemistry****Credits:** 4

Covers the fundamentals of chemistry. Topics include the metric system, problem-solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water; acids, bases, and salts; and gas laws.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or ASSET Numerical Skills, 40 or Test Waived-College Degree or 804-107 or 804-117 or 804-123 or 804-133) or (AccuPlacer Arithmetic, 065 or (AccuPlacer Arithmetic, 089 and AccuPlacer Elem Algebra, 030) and (COMPASS Reading Skills, 73 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree) or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-139 Survey Of Physics****Credits:** 3

This course emphasizes understanding basic physics concepts through laboratory investigation and applications. Topics include kinematics, dynamics, work, energy, power, temperature, heat, waves, electricity, magnetism, electromagnetic waves, optics, and atomic and nuclear physics.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-140 Physics****Credits:** 3

This course is designed to acquaint the students with basic concepts of physics and their applications. Topics covered include algebra (a review), measurement, motion, forces, work, energy, power, simple machines, heat, and electricity. Laboratory exercises are designed to expand upon and reinforce lecture material.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**806-152 Technical Science II****Credits:** 3

This course is a continuation of Technical Science I with a study of heat, wave motion and sound, light and optics, and an introduction to electricity and magnetism. Sufficient mathematical treatment is given to the materials so the student can apply the principles in a quantitative manner. The laboratory work includes computer-aided study and the appropriate experiments to illustrate the application of the physical principles.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** 806 151

Complete Course Listing

**806-154 General Physics 1****Credits:** 4

Presents the applications and theory of basic physics principles. This course emphasizes problem-solving, laboratory investigation, and applications. Topics include unit conversion and analysis, vectors, translational and rotational kinematics, translational and rotational dynamics, heat and temperature, and harmonic motion and waves.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (804-114 or 804-115) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or SAT Reading, 330 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-172 Basic Nutritional Science****Credits:** 3

This course provides an introduction into the science of nutrition. Basics concepts related to digestion and metabolism are presented. The significance of carbohydrates, lipids, proteins and vitamins to the human organism are discussed. The relationship of proper nutrition to selected pathological conditions throughout the human lifecycle is presented. The concept of sustainability and environmentally - conscious food production introduced.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing



**806-175 General Pathophysiology****Credits:** 3

This introductory course in pathophysiology covers topics related to alterations of homeostasis and the associated pathophysiological processes. The major emphasis will be on the physiological factors that underlie disease states. Course studies include the processes involved that generate illness; signs and symptoms of commonly occurring illness states and effects of disease processes on the cell. Review of normal homeostatic mechanisms is included. Study of the fundamental processes in relation to the pathophysiological processes can enable the students to apply this knowledge to clinical situations.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (806-179) and (COMPASS Reading Skills, 73 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251)

Complete Course Listing

**806-177 General Anatomy and Physiology****Credits:** 4

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision-making and professional communication with colleagues and patients.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and (Chemistry, 1.0 or 856-787 or 806-199 or 806-134)

Complete Course Listing

**806-179 Advanced Anatomy and Physiology****Credits:** 4

Advanced Anatomy and Physiology is the second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body systems approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery within a classroom and laboratory setting. Experimentation within a science lab will include analysis of cellular metabolism, the individual components of body systems such as the nervous, neuro-muscular, cardiovascular, and urinary. Continued examination of homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance and blood. Integration of genetics to human reproduction and development are also included in this course.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (806-195 or 806-177 or 806-177 or 806-131)

Complete Course Listing

**806-186 Introduction to Biochemistry****Credits:** 4

Provides students with skills and knowledge of organic and biological chemistry necessary for application within Nursing and other Allied Health careers. Emphasis is placed on recognizing the structure, physical properties and chemical reactions of organic molecules, body fluids, and acids. Additional emphasis is placed on biological functions and their relationships to enzymes, proteins, lipids, carbohydrates and DNA.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (Chemistry, 1.0 or 856-787 or 856-787 or 806-134) and (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or SAT Reading, 330 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-139 or 806-154 or 806-177 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)**Co-requisites:** (838-104)

Complete Course Listing

**806-189 Basic Anatomy****Credits:** 3

Examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

**806-194 Survey of Anatomy and Physiology****Credits:** 3

This course is designed to provide a basic understanding of human anatomy, physiology, diseases, and terminology to assist with the transcription and coding of medical documents.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)**Co-requisites:** (838-104)

Complete Course Listing



**806-197 Microbiology****Credits:** 4

This course examines microbial structure, metabolism, genetics, growth and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms and the medical impact of microbes in the environment, industry, and biotechnology are also addressed.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (806-177 or 806-195 or 806-196 or 806-179 or 806-199 or COMPASS Reading Skills, 73 or ACT Reading, 16 or SAT Reading, 330 or AccuPlacer Reading Comp, 76 or Next Gen AccuPlacer Reading, 251) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-199 General, Organic and Biological Chemistry****Credits:** 4

A one semester course covering the fundamental aspects of inorganic and organic chemistry. Topics include lab safety, measurement, elementary problem solving, atomic structure, periodicity, chemical bonding, types of chemical reactions, properties of water, acid, bases, and salts, types of solutions and calculations of concentrations, gas laws, oxidation-reduction concepts, ionization, pH and buffers, hydrocarbons, types of organic compounds and functional groups, biochemical compounds including lipids, carbohydrates, proteins, and nucleic acids.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 073 or ACT Reading, 16 or ASSET Reading Skills, 39 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**806-315 Applied Science****Credits:** 2

This one semester course in basic physics principles reviews accuracy and precision of measurements and introduces calculations with units and conversions within and between systems of measurements. Formula rearranging and applications to problem solving are reviewed. Basic physics topics such as properties of matter, mechanical principles of force, motion (linear and circular), energy, power and machines, heat, electricity, and magnetism are also studied. Emphasis is placed on the applications of the laws and principles of physics to practical problems. The use of vectors is demonstrated in forces, velocities, and electrical transformers.

**Aid Code:** 31 - One-year Technical Diploma.**Co-requisites:** (804-304 or 804-306)

Complete Course Listing

**806-333 Aviation Physics****Credits:** 2

This is a one-semester course in basic physics principles for aviation maintenance technicians. It includes a review of the units of measurement and conversions along with the properties of fluids. Mechanics (linear motion, equilibrium, energy, power, circular motion and machines), heat (temperature scales, specific heats and transfer), along with sound (wavelength, frequency, speed and intensity) are included. Special emphasis is given to problems applying these principles to the particular area of technology.

**Aid Code:** 32 - Two-year Technical Diploma.

Complete Course Listing

**Social Science (809)****Information provided includes course descriptions by subject only.**

**For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**809-103 Think Critically and Creatively****Credits:** 3

This course provides instruction in the vital, realistic and practical methods of thinking which are in high demand in all occupations of substance today. Decision making, problem solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more are considered in depth as the student applies specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is demonstrations, discussions, project and teamwork based. Assignments range from the short and simple to the detailed and complex. Reality and practicality are the focuses all through the course.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199)

Complete Course Listing

**809-122 Intro to American Government****Credits:** 3

Introduces American political processes and Institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties and public opinion in the political process. Also explores the role of state and national government in our federal system.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (COMPASS Reading Skills, 73 or ACT Reading, 16 or AccuPlacer Reading Comp, 76 or Next Gen AccuPlacer Reading, 251) or SAT Reading, 330 or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing

**809-143 Microeconomics****Credits:** 3

This course examines the behavior of individual decision makers, primarily consumers and firms. Topics include choices of how much to consume and to produce, the functioning of perfectly and imperfectly competitive markets, the conditions under which markets may fail, and arguments for and against government intervention. The student applies the fundamental tools of economics to real world problems.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 250 or SAT Reading, 330 or Test Waived-College Degree or Reading-Credit Level Met or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or AccuPlacer Reading Comp, 55 or ACT Reading, 12 or SAT Reading, 270 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing

**809-144 Macroeconomics****Credits:** 3

Macroeconomics is an introductory course. Basic social choices regarding economic systems, basic economic aggregates, fiscal policy, the banking system, monetary policy, and international trade are the principle topics discussed in the course. Balance is drawn between theory, analysis, and a critique of the institutions that characterize modern mixed-capitalist economies. Conflicting social goals, economic constraints, and environmental concerns provide the framework through which the macroeconomy is analyzed.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** COMPASS Reading Skills, 73 or ACT Reading, 16 or AccuPlacer Reading Comp, 76 or Next Gen AccuPlacer Reading, 251 and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or AccuPlacer Reading Comp, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing

**809-159 Abnormal Psychology****Credits:** 3

The course in Abnormal Psychology surveys the essential features, possible causes, and assessment and treatment of the various types of abnormal behavior from the viewpoint of the major theoretical perspectives in the field of abnormal psychology. Students will be introduced to the diagnosis system of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). In addition, the history of the psychology of abnormality will be traced. Cultural and social perspectives in understanding and responding to abnormal behavior will be explored as well as current topics and issues within abnormal psychology.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (809-198) and 801-195 or 801-136 or (ACT Reading, 16 or COMPASS Reading Skills, 73 or AccuPlacer Reading Comp, 76 or Next Gen AccuPlacer Reading, 251 or Test Waived-College Degree)  
Complete Course Listing

**809-166 Introduction to Ethics: Theory and Application****Credits:** 3

This course provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social and/or professional standards of behavior, and apply a systematic decision-making process to these situations.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 250 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and ASSET Reading Skills, 55 or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing

**809-172 Introduction to Diversity Studies****Credits:** 3**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or SAT Reading, 260 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-188 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104  
Complete Course Listing

**809-174 Social Problems****Credits:** 3

Explores the causes of and possible solutions to selected social problems such as inequality, crime and deviance, and poverty. Students will examine the interrelationship of social problems and their roots in fundamental societal institutions.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (809-196 or Test Waived-College Degree)

Complete Course Listing

**809-188 Developmental Psychology****Credits:** 3

Developmental Psychology is the study of human development throughout the lifespan. This course explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills will enable students to gain an increased knowledge and understanding of themselves and others.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-195 or 809-143 or 809-196 or 809-198 or 809-199) and COMPASS Writing Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)**Co-requisites:** (838-104)

Complete Course Listing

**809-195 Economics****Credits:** 3

This course is designed to give an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-196 or 809-198 or 809-199) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)**Co-requisites:** (838-104)

Complete Course Listing

**809-196 Introduction to Sociology****Credits:** 3

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or SAT Reading, 330 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 260 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-198 or 809-199) and COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)**Co-requisites:** (838-104)

Complete Course Listing

**809-198 Introduction to Psychology****Credits:** 3

This introductory course in psychology is a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings.

**Aid Code:** 10 - Associate Degree.**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or Reading-Credit Level Met or SAT Reading, 330 or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-143 or 809-196 or 809-199) and COMPASS Writing Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)**Co-requisites:** (838-104)

Complete Course Listing

**809-199 Psychology of Human Relations****Credits:** 3

Explores the relationship between the general principles of psychology and our everyday lives. Students are given the opportunity to achieve a deepened sense of awareness of themselves and others. This understanding enables students to improve their relationships with others at work, in the family, and in society.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or AccuPlacer Reading Comp, 076 or Next Gen AccuPlacer Reading, 251 or SAT Reading, 330 or Reading-Credit Level Met or Test Waived-College Degree or 838-104 or 838-104 or 801-195 or 801-136 or 801-196 or 801-198 or 804-133 or 806-110 or 806-112 or 806-118 or 806-134 or 806-139 or 806-154 or 806-177 or 806-186 or 806-194 or 806-199 or 809-103 or 809-166 or 809-172 or 809-188 or 809-195 or 809-196 or 809-198) or COMPASS Reading Skills, 51 or ACT Reading, 12 or SAT Reading, 270 or ASSET Reading Skills, 55 or Next Gen AccuPlacer Reading, 236)

**Co-requisites:** (838-104

Complete Course Listing

**809-352 Skills for Successful Employee****Credits:** 2

This course seeks to ready the student for employment by discussing specific "human" skills that lead to success on the job. The topics presented may include: the importance of having a good attitude; the need to recognize that customers "buy" much more than a clearly defined product or service; and knowing how to treat customers, how to influence them, how to handle complaints, and how to sell. Students will also become aware of the need for self-organization, for innovation, for teamwork, and for effective management.

**Aid Code:** 31 - One-year Technical Diploma.

**Pre-requisites:** (ASSET Reading Skills, 39 or COMPASS Reading Skills, 073 or ACT Reading, 16 or Test Waived-College Degree or 838-104 or 838-104)

Complete Course Listing

**809-700 Growth, Relationships, Information & Technology****Credits:** 1

GRIT is a course that is designed to support students in their first semester to recognize their ability to grow and persist in college. Students will become more familiar with various academic and non-academic support services available to them such as career guidance, tutoring, financial assistance and academic counseling. Computer technology skills and college readiness skills such as time management, critical thinking/reading and student strategies will be emphasized to support student success.

**Aid Code:** 10 - Associate Degree.

Complete Course Listing

## PRE-COLLEGE

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Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

### General College - Reading (838)

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Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

#### 838-104 Introduction to College Reading Credits: 2

Provides learners with opportunities to develop and expand reading skills including comprehension and vocabulary. Learners apply reading skills to academic tasks and read to acquire information from a variety of sources. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Reading Skills, 34 or COMPASS Reading Skills, 051 or ACT Reading, 12 or AccuPlacer Reading Comp, 055 or Next Gen AccuPlacer Reading, 236 or Reading-Precollege Level Met or 858-790)  
Complete Course Listing

### General College: Comm Skills (831)

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Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

#### 831-103 Introduction to College Writing Credits: 3

Introduces basic principles of composition, including organization, development, unity, and coherence in paragraphs and multi-paragraph documents. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Writing Skills, 38 or COMPASS Writing Skills, 038 or ACT English, 15 or AccuPlacer Sentence Skills, 063 or Next Gen AccuPlacer Writng, 242 or Writing-Precollege Level Met or 851-781) and (AccuPlacer Reading Comp, 055 or COMPASS Reading Skills, 051 or ACT Reading, 12 or ASSET Reading Skills, 34 or Next Gen AccuPlacer Reading, 236 or Reading-Precollege Level Met or 858-790)  
Complete Course Listing

### General College: Mathematics (834)

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Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

#### 834-109 Pre-Algebra Credits: 3

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra related courses. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 35 or COMPASS Pre-Algebra Skills, 025 or ACT Math, 15 or AccuPlacer Arithmetic, 050 or 854-781)  
Complete Course Listing

#### 834-110 Elementary Algebra with Applications Credits: 3

This course offers traditional algebra topics with applications. Learners develop algebraic problem solving techniques needed for technical problem solving and for more advanced algebraic studies. Topics include linear equations, exponents, polynomials, rational expressions, and roots and radicals. Successful completion of this course prepares learners to succeed in technical mathematics courses.

**Aid Code:** 10 - Associate Degree.

**Pre-requisites:** (ASSET Numerical Skills, 40 or COMPASS Pre-Algebra Skills, 044 or ACT Math, 17 or Test Waived-College Degree or 834-109 or 834-109) or (AccuPlacer Arithmetic, 089 or (AccuPlacer Arithmetic, 065 and AccuPlacer Elem Algebra, 030) or Next Gen AccuPlacer Arithmetic, 272) or Next Gen AccuPlacer Arithmetic, 257 and Next Gen AccuPlacer QRAS, 210  
Complete Course Listing



## BASIC SKILLS EDUCATION

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

### Career Education (862)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

#### 862-764 BSE Employability Skills/Career Decision 2

Credits: 3

Develops general information involved with career choices including self-concept, values, needs and abilities. Occupational information and expansion of vocational choices are included. Outside speakers are invited to share information. Hands on experience includes filling out forms, interviews and study of resumes.

**Aid Code:** 74 - Interim ABE (6.0-8.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing

- \* A **TBA Class** is an individualized class that meets in the indicated Learning Lab during Lab hours.  
The hours are flexible, and students work at their own pace. These classes require approximately 4-6 hours per week in the Learning Lab to be successful.  
Please stop by Room 2216, or call 608-757-7676, if you have any questions, or would like to set up a schedule.

### Computer Basics (860)

Information provided includes course descriptions by subject only.  
For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

#### 860-764 Computer Basics

Credits: 3

This course covers elementary computer skills such as file management; document formatting, creating and management; using the Internet; basic e-mail and information management.

**Aid Code:** 74 - Interim ABE (6.0-8.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing

- \* A **TBA Class** is an individualized class that meets in the indicated Learning Lab during Lab hours.  
The hours are flexible, and students work at their own pace. These classes require approximately 4-6 hours per week in the Learning Lab to be successful.  
Please stop by Room 2216, or call 608-757-7676, if you have any questions, or would like to set up a schedule.

### English (851)

Information provided includes course descriptions by subject only.

For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

#### 851-713 BSE Communications I

Credits: 3

Introductory course includes basics of punctuation, spelling, capitalization as needed for written expression in everyday situations. Basic sentence and paragraph construction will be included.

**Aid Code:** 73 - Beg ABE (0-5.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing

#### 851-762 Communication 2

Credits: 3

This course develops conventions of English structure, usage, mechanics and spelling in order to write and expand ideas. It includes practice in writing, correcting, and revising. The focus will be on expression of ideas through e-mails, business letters, and paragraphs. Successful completion of Communication 2 is required for progression to Communication 3.  
\*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interim ABE (6.0-8.9).

**Pre-requisites:** (COMPASS Writing Skills, 001 or AccuPlacer Sentence Skills, 030 or Next Gen AccuPlacer Writing, 220 or ACT English, 01)  
Complete Course Listing

#### 851-763 BSE Writing for Accuplacer

Credits: 2

This course will provide instruction in writing skills needed to be successful on the Accuplacer writing test.

**Aid Code:** 74 - Interim ABE (6.0-8.9).

Complete Course Listing

#### 851-764 Communication 2 GED Review

Credits: 3

This course develops conventions of English structure, usage, mechanics, and spelling in order to write and expand ideas. It includes practice in writing, correcting and revising for the GED test at the pre-GED level.

\*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interim ABE (6.0-8.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing

#### 851-771 BSE Communication 3, GED

Credits: 3

A continuation of Communications 2. Expansion of English structure, usage and mechanics with emphasis on writing skills needed for the essay component of the GED Writing Skills test.

**Aid Code:** 76 - HS Dip, GED, HSED (9.0-12.9).

Complete Course Listing



**851-772 Communication 3 GED Review****Credits:** 3

This course further develops conventions of English structure, usage, mechanics, and spelling in order to write and expand ideas. It includes practice in writing, correcting, and revising for the Reasoning Through Language Arts GED test. This course may also develop communication skills as needed for the Mathematical Reasoning, Social Studies, and Science GED tests. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED,HSED (9.0-12.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**851-781 Communication 3****Credits:** 2

This course will include the basic points and refinement of grammar, spelling and the writing of paragraphs and essays. Successful completion of Communication 3 with a C or better is required for progression to Intro to College Writing. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED,HSED (9.0-12.9).**Pre-requisites:** (ASSET Writing Skills, 35 or COMPASS Writing Skills, 025 or ACT English, 12 or AccuPlacer Sentence Skills, 046 or Next Gen AccuPlacer Writng, 230 or 851-762)

Complete Course Listing

**851-795****Credits:** 1

A small group and individualized instruction course that helps students develop college-level writing skills. Emphasizes writing process strategies. Must be taken concurrently with Written Communication or English Composition 1.

**Aid Code:** 77 - ASE Developmental.**Pre-requisites:** (ACT English, 15 or COMPASS Writing Skills, 038 or SAT Writing, 290 or AccuPlacer Sentence Skills, 063 or Next Gen AccuPlacer Writng, 242 or 851-781)**Co-requisites:** 801-195 or 801-136)

Complete Course Listing

- \* A **TBA Class** is an individualized class that meets in the indicated Learning Lab during Lab hours.
- The hours are flexible, and students work at their own pace. These classes require approximately 4-6 hours per week in the Learning Lab to be successful.
- Please stop by Room 2216, or call 608-757-7676, if you have any questions, or would like to set up a schedule.

## English Language Learners (861)

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**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to**  
**Academic Programs (p. 22).**

**861-701 English as a Second Language, Advanced Communication****Credits:** 3

Learners will discriminate common stress patterns, reductions, intonation, pitch patterns, and thought groups. Learners will utilize rules of grammar to form affirmative and negative statements and questions using simple, continuous, perfect and perfect continuous tenses. The use of conditional sentences and active/passive voice will be explored. Learners will be expected to use sustained speech to participate in discussions about unfamiliar topics, share experiential stories, and present oral reports of various types.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-702 ELL College Transitions Course****Credits:** 1

This 36-hour course will assist English Language Learners (ELL) in bridging the gap between ELL program completion and readiness for success in a postsecondary program. Students will develop basic computer and academic skills, as well as identify and explore career interests. Students must have instructor recommendation to enroll.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-704 English as a Second Language, Advanced Mathematics****Credits:** 3

This course focuses on the application of skills to solve word problems. Learners will apply concepts of whole numbers, fractions, decimals, percents, proportion, algebra, and geometry to solve multiple step word problems.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-705 English as a Second Language, Advanced****Credits:** 3

Learners in this course will analyze the systems in the world of work in the U.S. including chain of command, steps to filing a grievance, resolution of discriminatory practices, insurance options, and networking. All learners will develop resumes and practice writing cover letters as well as participate in mock interviews. Career options will be explored using a variety of materials and techniques.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-708 English as a Second Language, Advanced Reading****Credits:** 3

Learners will demonstrate comprehension of a variety of written work including short stories, consumer warnings, software instructions, newspapers, magazines, and college catalogues. Activities include identification of main idea and details, making inferences, identification of author's bias, and the identification of characters, setting, and plot. The writing process will be used to construct multiple-paragraph compositions. Learners will use reference tools including the dictionary, thesaurus, atlas, encyclopedia, software and the Internet.

**Aid Code:** 75 - ESL W/Instrl Area 861.

Complete Course Listing

**861-711 English as a Second Language, Beginning Literacy, Communication**  
**Credits: 3**

Instruction and practice in the use of formal and informal conversational language. Students build vocabulary and learn to use numbers, emergency and health language, identify types of jobs and classroom objects. Basic pronunciation, speaking, and listening strategies are developed. Basic grammar and writing skills are introduced and practiced. Programs are infused with and enhanced by technology.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-714 English as a Second Language, Beginning Literacy, Mathematics**  
**Credits: 3**

Develops language and skills needed for beginning math. Topics include number concepts, mathematical language and whole numbers. This level introduces fractions, decimals, measurements and geometric shapes. Students develop critical thinking skills to problem solve, perform computations, estimate results, interpret and develop data, work with appropriate technology and apply mathematics to real-world situations.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-715 English as a Second Language, Beginning Literacy**  
**Credits: 3**

Students develop basic language skills in the area of speaking, listening, reading and writing in the context of real-life survival skills. It is aimed at developing the listening comprehension and oral skills of beginning level learners of English. Students at this level function minimally, if at all, in English.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-718 English as a Second Language, Beginning Literacy, Reading**  
**Credits: 3**

Instruction to teach discrimination and correct orientation of the English alphabet, to introduce symbol/sound relationships, and the meaning of common signs and symbols. Students learn to recognize personal information print, use maps, calendars, and picture dictionaries. Students also begin to develop basic comprehension strategies at this level.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-731 English as a Second Language, Low Beginning, Communication**  
**Credits: 3**

Instruction to improve basic communication skills including: speaking, listening, pronunciation, writing, and grammar. Students learn to write and speak using simple past, present and future verb forms, generate simple affirmative and negative statements and questions, discriminate sounds, and respond to simple imperatives. Computer technology will assist students.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-734 English as a Second Language, Low Beginning, Mathematics**  
**Credits: 3**

Reviews ESL Beginning Math content and develops language and skills needed for Beginning/Intermediate Math. Concepts covered include fractions, decimals, measurements, mathematical language, percents, ratios and proportions. This level introduces basic algebra and geometry concepts. Students will use critical thinking skills to problem solve, perform computations, estimate results, interpret and develop data, work with appropriate technology and apply mathematics to real-world situations.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-735 English as a Second Language, Low Beginning**  
**Credits: 3**

Classes at this level provide relevant language in real-life contexts. This class uses an experience centered approach to give student survival skills as quickly as possible. This program provides plenty of opportunity to use language, while developing grammatical skills. Students at this level will begin to form simple sentences and be able to communicate with others. Students learn about standard social norms in the United States, the work ethic in the United States, and how to apply basic study skills.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-738 English as a Second Language, Low Beginning, Reading**  
**Credits: 3**

Instruction to improve basic reading skills and expand vocabulary. Students learn to comprehend and respond to a range of printed material, employ a variety of comprehension strategies, recognize formal and informal language, and develop fluency.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-751 English as a Second Language, High Beginning, Communication**  
**Credits: 3**

Instruction to improve speaking, listening, pronunciation, writing, and grammar skills. Students learn to use the writing process to compose short paragraphs and workplace reports, develop an awareness of language patterns, utilize rules of grammar, use formal and informal conversational language and respond to multi-step process directions. Computer technology is used to enhance the learning experience. Students will learn to use word processing tools.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-754 English as a Second Language, High Beginning, Math**  
Credits: 3

This course introduces basic concepts and language skills needed in algebra and geometry such as signed numbers, powers and roots, algebraic expressions, equations, rectangular coordinates, polynomials, angles, triangles and plane and solid figures. This course allows the student to work on areas in math that they need to be successful in later course work or in their career.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-755 English as a Second Language, High Beginning**  
Credits: 3

Students learn about school services and how to access them. They will participate in formal and informal conversations about legal and basic human rights. Students learn to write cover letters, resumes, and to complete job applications. Development of study skills is stressed, and students will learn to apply learning and test taking skills and strategies and actively participate in the learning process.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-758 English as a Second Language, High Beginning Reading**  
Credits: 3

Instruction to improve reading skills and expand vocabulary. Students improve comprehension skills and learn to respond critically to a range of printed material. Employability vocabulary and the use of workplace terminology are expanded. Students develop greater fluency and increase their reading rate.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-771 English as a Second Language, Low Intermediate**  
**Communication**  
Credits: 3

Learners will identify sounds of English, use basic pronunciation strategies, and discriminate speech. Formal and informal conversational language skills will be developed through participation in a variety of activities. Learners will use sustained speech to give short explanations, descriptions, and process directions.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-774 English as a Second Language, Low Intermediate Mathematics**  
Credits: 3

Learners will use critical thinking skills to solve problems using fractions, decimals, percents, and proportions. Basic algebra and geometry concepts will be introduced.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-775 English as a Second Language, Low Intermediate**  
Credits: 3

Learners will use pre-employment resources such as classified ads, employment agencies, web sites and the Rock County Job Center to complete a variety of assignments and tasks. Employer expectations such as punctuality, attitude, team work, and appreciation for diversity will be discussed. Learners will participate in activities to prepare for interviews.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-778 English as a Second Language, Low Intermediate Reading**  
Credits: 3

Learners will demonstrate comprehension of a range of printed materials including road signs, safety signs, newspaper articles, rhythm chants, short narratives, and fairy tales. Comprehension strategies studies will include recognition of compound words, homonyms, prefixes, and suffixes. Learners will demonstrate an awareness of a variety of language patterns and utilize rules of grammar to form statements and questions in simple and continuous tenses.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-791 English as a Second Language, High Intermediate**  
**Communication**  
Credits: 3

Learners will discriminate speech, display active listening skills, and increase survival language. Formal and informal conversational language will be practiced. Learners will be expected to use sustained speech to generate two-person dialogues about familiar topics and share experiential stories. There will be instruction and practice using a variety of grammatical structures including the perfect tenses and tag questions.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-794 English as a Second Language, High Intermediate Mathematics**  
Credits: 3

Learners will be introduced to basic concepts and language skills needed in algebra and geometry such as signed numbers, equations, rectangular coordinates, polynomials, angles, triangles, and plane and solid figures.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

**861-795 English as a Second Language, High Intermediate**  
Credits: 3

Learners will identify the raise-promotion process, discuss the purpose of personnel files, discuss employer expectations, and identify discriminatory practices. Interview etiquette will be discussed and practiced. Activities will lead to greater understanding of American cultural practices such as volunteerism, competitiveness, parenting, and neighborhood interaction.

**Aid Code:** 75 - ESL W/Instl Area 861.

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**861-798 English as a Second Language, High Intermediate Reading**  
**Credits: 3**

Learners will analyze a variety of printed material and identify main ideas, supporting details, predict outcomes, make inferences, and draw conclusions. Sources will include textbooks, newspapers, magazines, school notices, schedules, nutrition labels, and consumer instructions. Learners will use the writing process to compose organized paragraphs.

**Aid Code:** 75 - ESL W/Instl Area 861.

Complete Course Listing

- \* A **TBA Class** is an individualized class that meets in the indicated Learning Lab during Lab hours. The hours are flexible, and students work at their own pace. These classes require approximately 4-6 hours per week in the Learning Lab to be successful. Please stop by Room 2216, or call 608-757-7676, if you have any questions, or would like to set up a schedule.

## Health Education (857)

**Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**857-771 BSE Health, HSED**  
**Credits: 2**

Overview of general health practices needed for healthy adult and family living. Allows students seeking a Wisconsin state HSED to meet the requirements of that diploma.

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing

**857-781 BSE Health**  
**Credits: 1**

This course teaches the basics of health for the individual, family, and community. Mental and emotional health will be discussed as well as first aid, substance abuse, consumer health, environmental health, and death and dying. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing

- \* A **TBA Class** is an individualized class that meets in the indicated Learning Lab during Lab hours. The hours are flexible, and students work at their own pace. These classes require approximately 4-6 hours per week in the Learning Lab to be successful. Please stop by Room 2216, or call 608-757-7676, if you have any questions, or would like to set up a schedule.

## Mathematics (854)

**Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**854-713 BSE Mathematics 1**  
**Credits: 3**

Develops number concepts, mathematical language and whole number topics. This level introduces fractions, decimals, measurements and geometric shapes. Students use critical thinking skills to problem solve, perform computations, estimate results, interpret and develop data, work with appropriate technology and apply mathematics to real-world situations.

**Aid Code:** 73 - Beg ABE (0-5.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing

**854-762 Math 2**  
**Credits: 3**

This course reviews whole numbers and develops fractions, decimals, measurements, mathematical language, percents, ratios, and proportions. This level may introduce basic algebra and geometry concepts. Students use critical thinking skills to problem solve, perform computations, estimate results, interpret and develop data, work with appropriate technology and apply mathematics to real-world situations. Successful completion of Math 2 is required for progression to Math 3. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).

**Pre-requisites:** (COMPASS Pre-Algebra Skills, 001 or AccuPlacer Arithmetic, 020 or ACT Math, 01 or Next Gen AccuPlacer Arithmetic, 200)  
Complete Course Listing

**854-763 BSE Mathematics for Accuplacer**  
**Credits: 2**

This course will provide instruction in math skills needed to be successful on the ACCUPLACER math test.

**Aid Code:** 74 - Interm ABE (6.0-8.9).

Complete Course Listing

**854-764 Math 2 GED Review**  
**Credits: 3**

This course develops math skills needed for the Mathematical Reasoning GED test at the pre-GED level. This course reviews whole numbers and develops fractions, decimals, measurements, mathematical language, percents, ratios, and proportions. This level may introduce basic algebra and geometry concepts. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing

**854-765 BSE Certified Nursing Assistant Mathematics**  
**Credits: 2**

This course will provide instruction in math skills needed to be successful in the Certified Nursing Assistant Program.

**Aid Code:** 74 - Interm ABE (6.0-8.9).

Complete Course Listing

**854-771 BSE Mathematics, GED****Credits:** 3

Introduction to algebra and geometry. A continuation of BSE, Math 2. Provides more advanced, higher level thinking and problem solving skills needed for the GED test.

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).

Complete Course Listing

**854-772 Math 3 GED Review****Credits:** 3

This course reviews whole numbers and develops fractions, decimals, measurements, mathematical language, percents, ratios, and proportions. It includes an introduction to algebra and geometry and provides more higher level thinking and problem solving skills needed for the Mathematical Reasoning GED test. It may also develop math skills needed for the Social Studies and Science GED tests. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**854-778 BSE Mathematics 3, Nursing Mathematics****Credits:** 2

Designed for students entering the Associate Degree Nursing program. Topics will include decimals, fractions, percents, metric measurements, conversions, concentrations, significant figures, scientific notation, working with formulas, and solving for the unknown. Special emphasis will be placed on preparing for the math tests required by the ADN program. This course does NOT satisfy the Program Ready requirement for the ADN program. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

**854-781 Math 3****Credits:** 2

This course will include a review of whole numbers, fractions, ratios, proportions, and percents. It will also focus on English and metric conversions, applied geometry, basic statistics, and graph reading. Finally, students will develop their signed number skills as well as learn how to solve equations after an introduction to basic algebraic concepts. Successful completion of Math 3 with a C or better is required for progression to Pre-Algebra. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED.HSED (9.0-12.9).**Pre-requisites:** (ASSET Numerical Skills, 26 or COMPASS Pre-Algebra Skills, 018 or ACT Math, 13 or AccuPlacer Arithmetic, 030 or Next Gen AccuPlacer Arithmetic, 210 or 854-762)

Complete Course Listing

**854-789 BSE Mathematics 3, Modu Math Algebra****Credits:** 3

This computer program uses practical video segments and drill practice to improve basic math skills, including drill and practice, required for complete mastery of basic operations involving whole numbers, fractions, decimals, percents, and signed numbers. This introductory algebra course covers basic concepts; order or operations; adding, subtracting and multiplying laws; problem solving; inequalities; graphing; factoring; quadratics and more. Students may use this for the algebra requirement of many apprenticeship programs. \*Credits earned this course will not be counted toward the number of credits needed for any degree.

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

**854-802****Credits:** 1

A small group and individualized instruction course that helps students develop precollege math skills. Emphasizes number operations needed to define and solve algebra and geometry problems and mathematical learning strategies. Must be taken concurrently with Pre-Algebra.

**Aid Code:** 77 - ASE Developmental.**Pre-requisites:** (COMPASS Pre-Algebra Skills, 24 or ACT Math, 14 or SAT Mathematics, 340 or AccuPlacer Arithmetic, 49 or Next Gen AccuPlacer Arithmetic, 242)**Co-requisites:** (834-109)

Complete Course Listing

**854-805****Credits:** 1

Highly interactive format providing small group and individualized mathematics instruction that helps students develop mathematical skills and strategies for succeeding in college-level math. Must be taken concurrently with Mathematical Reasoning.

**Aid Code:** 77 - ASE Developmental.**Pre-requisites:** 854-781 or COMPASS Pre-Algebra Skills, 025 or ACT Reading, 15 or SAT Reading, 340 or AccuPlacer Arithmetic, 050 or Next Gen AccuPlacer Arithmetic, 243**Co-requisites:** (804-134)

Complete Course Listing

- \* A **TBA Class** is an individualized class that meets in the indicated Learning Lab during Lab hours. The hours are flexible, and students work at their own pace. These classes require approximately 4-6 hours per week in the Learning Lab to be successful. Please stop by Room 2216, or call 608-757-7676, if you have any questions, or would like to set up a schedule.

## Reading (858)

**Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**



**858-713 BSE Reading 1****Credits:** 3

Introduces basic reading skills needed by adults for everyday living. The students expand their vocabulary by learning to recognize and pronounce words. Emphasis is placed on understanding the material read, including books, computer software and newspaper articles. A variety of instructional approaches will be used.

**Aid Code:** 73 - Beg ABE (0-5.9).**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing**858-762 Reading 2****Credits:** 3

This course will include dictionary use, vocabulary in context, main ideas, supporting details, inferences and vocabulary building. Successful completion of Reading 2 is required for progression to Reading 3. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).**Pre-requisites:** (COMPASS Reading Skills, 001 or AccuPlacer Reading Comp, 020 or ACT Reading, 01 or Next Gen AccuPlacer Reading, 213)  
Complete Course Listing**858-763 BSE Reading for Accuplacer****Credits:** 2

This course will provide instruction in reading skills needed to be successful on the Accuplacer reading test.

**Aid Code:** 74 - Interm ABE (6.0-8.9).

Complete Course Listing

**858-764 Reading 2 GED Review****Credits:** 3

The course focuses on reading in the GED content areas. It includes skills of comprehension, application, and analysis as needed for the GED content area tests at the pre-GED level. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 74 - Interm ABE (6.0-8.9).**Pre-requisites:** (GED/ESL/BS Course Approval)  
Complete Course Listing**858-771 Reading 3 GED Review****Credits:** 3

This course further develops reading in the GED content areas. It includes continued work in comprehension, application and analysis as needed for the GED content area tests. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED,HSED (9.0-12.9).

Complete Course Listing

**858-790 Reading 3****Credits:** 2

This course focuses on word analysis strategies, building vocabulary and comprehending at an inferential and critical level. The purpose is to establish the groundwork for college reading. Successful completion of Reading 3 with a C or better is required for progression to Intro to College Reading. \*Credits earned in this course will not be counted toward the number of credits needed for any degree. This course is not eligible for financial aid, and the credits do not count in enrollment status for financial aid eligibility.\*

**Aid Code:** 76 - HS Dip,GED,HSED (9.0-12.9).**Pre-requisites:** (ASSET Reading Skills, 31 or COMPASS Reading Skills, 033 or ACT Reading, 10 or AccuPlacer Reading Comp, 034 or Next Gen AccuPlacer Reading, 223 or 858-762)  
Complete Course Listing

- \* A **TBA Class** is an individualized class that meets in the indicated Learning Lab during Lab hours.  
The hours are flexible, and students work at their own pace. These classes require approximately 4-6 hours per week in the Learning Lab to be successful.  
Please stop by Room 2216, or call 608-757-7676, if you have any questions, or would like to set up a schedule.

## Science (856)

**Information provided includes course descriptions by subject only.**  
**For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).**

**856-779 BSE Science 3 Pharmacology Preparation****Credits:** 2

Designed for students entering the Associate Degree Nursing program. The course will be an introduction to pharmacology, one of the hardest courses taken by nursing students. In addition, students will develop other skills needed for success (and survival) in the nursing program, such as test taking strategies and writing papers in APA format. \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

**856-785 BSE Science 3, Anatomy and Physiology Preparation****Credits:** 2

Prepares students for the college level courses of anatomy and physiology needed by nursing, physical therapy, and other health related programs. Competency objectives are based on the skills needed to be successful in future courses in anatomy and physiology. Basic concepts in anatomy and physiology are covered along with study skills to help students become "self-learners". \*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing



**856-787 BSE Science 3, Chemistry Preparation****Credits:** 3

Designed for students entering particular vocational/technical programs that require basic knowledge of chemistry. Students learn basic chemical principles by listening to lectures, participating in class discussions and laboratory experiments. Equivalent to a full-year of high school chemistry.

\*Credits earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

**856-796 Kinesiology Preparation****Credits:** 2

Designed for students entering the Physical Therapy Assistant program. The course will be an introduction to kinesiology. Introduces basic principles in musculoskeletal anatomy, kinematics and the identification of joints and muscle attachments and actions. \*Credit earned in this course will not be counted toward the number of credits needed for any degree.\*

**Aid Code:** 77 - ASE Developmental.

Complete Course Listing

- \* A **TBA Class** is an individualized class that meets in the indicated Learning Lab during Lab hours. The hours are flexible, and students work at their own pace. These classes require approximately 4-6 hours per week in the Learning Lab to be successful. Please stop by Room 2216, or call 608-757-7676, if you have any questions, or would like to set up a schedule.

## Social Science (859)

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Information provided includes course descriptions by subject only. For complete 2020-2021 programs/academic plans, please refer to Academic Programs (p. 22).

**859-762 BSE Social Science 2 Review - Storefront****Credits:** 3

This course allows students to work on any area in the social sciences that they need to review to be successful in later course work, on the GED tests, or in their career.

**Aid Code:** 74 - Interm ABE (6.0-8.9).

**Pre-requisites:** (GED/ESL/BS Course Approval)

Complete Course Listing

**859-773 BSE Social Science, Civics, HSED****Credits:** 2

This course is an overview of the American government and how it impacts and influences the lives of American citizens. Areas of concentration are colonization, the constitution, branches of government, checks and balances, the Bill of Rights, state and local governments and citizen responsibility. Students who finish 30 hours of instruction in this course meet the citizenship requirement for the HSED certification.

**Aid Code:** 76 - HS Dip, GED, HSED (9.0-12.9).

Complete Course Listing

- \* A **TBA Class** is an individualized class that meets in the indicated Learning Lab during Lab hours. The hours are flexible, and students work at their own pace. These classes require approximately 4-6 hours per week in the Learning Lab to be successful. Please stop by Room 2216, or call 608-757-7676, if you have any questions, or would like to set up a schedule.

# STUDENT SUPPORT SERVICES

If you are a prospective or enrolled student interested in Blackhawk Technical College, you've come to the right place. Our Student Services team is here to help you throughout your educational journey. Our job is to help you from getting started all the way to graduation.

## Academic Advising

Advising services focus on the development of students. The purpose is to assist students in achieving their academic, career, and personal goals while at the College.

Students are encouraged to consult with their assigned Academic Advisor about any academic or personal problems. Their advisor can help them explore their aspirations, attitudes, and interests. Services include vocational guidance, career information, and assistance with academic and study problems.

The Advising Team is located within the Student Services Department at the Central Campus and at our other campuses (schedules vary). Advising assistance is also available on a drop-in basis but it is highly recommended to schedule an appointment. Services are also available at the outreach centers and in the evenings on a limited schedule.

For more information, or to schedule an appointment, call (608) 757-7668.

## Advising, Registration and Orientation Sessions (ARO)

All new students will be required to attend an Advising, Registration, and Orientation (ARO) session prior to registering in courses. During the ARO sessions, students will learn more about policies and procedures at Blackhawk Technical College, receive assistance with technology, meet with an advisor and financial aid specialist and register for courses.

In the first semester after attending an ARO session, students will be required to meet with their assigned Academic Advisor to create an individualized Master Academic Plan (MAP). Students are encouraged to work closely with their assigned Academic Advisor to create a plan that will help them reach their goals.

## Pathway Checkpoint

Pathway Checkpoint sessions occur during the first week of registration each semester. These sessions are optional but provide students with an opportunity to meet with an advisor and check their progress toward their degree. Students are required to bring a copy of their unofficial transcript and Master Academic Plan (MAP) to the Pathway Checkpoint. Advisors will verify that students are on track to graduation and assist with registration.

## Bookstore

Students are required to purchase their own textbooks and supplies. While it is not mandatory, students will usually find it convenient to purchase materials from the campus bookstore. The policy for a refund on book purchases is posted at the Bookstore. The receipt of purchase is required for any refund. A full refund on books used for full-semester courses is available up to one week after the first day of class. Full refunds are available for all other courses within 48 hours of the first

class. The Bookstore does have a book buyback program approximately one week prior to the end of the semester.

The Bookstore has available a wide range of textbooks, educational materials, and school supplies. The Bookstore is open Monday and Tuesday from 8:00 a.m. through 7:00 p.m., Wednesday and Thursday from 8:00 a.m. through 6:00 p.m., and Friday from 8:00 a.m. through 2:00 p.m. The Bookstore is open additional hours during the first week of classes. Call (608) 757-7672 for more specific information or access their website, [www.efollett.com](http://www.efollett.com). Services you can access via Follett's website include reserving and pre-paying online and then picking up in the store, buying online and having your books shipped, and purchasing software at student discount prices. You must have a credit card to pre-pay or have the books shipped.

## Campus Safety

### Alcohol and Illegal Drug Policies

The possession, and sale, of alcoholic beverages on BTC premises is strictly prohibited. In addition, the possession, use, and sale of alcohol are further regulated in accordance with applicable state and federal laws and Wisconsin Administrative codes. BTC cooperates with local police agencies to enforce underage drinking laws and other violations related to the possession, use, and sale of alcohol. As a BTC student you are expected to comply with all laws and District policies regarding the use of alcoholic beverages. Depending on the nature of the violation, you may face legal prosecution and/or corrective action in accordance with applicable laws and BTC procedures.

### Campus Safety

It is the intent of BTC to provide a safe, secure, and appropriate environment in which students can learn and employees can work. However, like all segments of society, situations may occur which threaten the security and safety of property and people. Assistance phones are located throughout the hallways at Central, Milton and Beloit campuses. These phones can be used to report an emergency by following the posted instructions. Deaf/hh, please call through Relay 9-711.

If you feel threatened, see criminal actions, or observe behavior which jeopardizes the safety and security of property and/or persons at BTC, you should report the incident immediately to 911 and the Security Office or BTC staff. BTC security or a staff member will assess the situation and determine if an emergency response is necessary. If the situation warrants emergency intervention, local law enforcement will be contacted to resolve the problem and investigate the incident. Any non-emergency incident of property damage, theft, burglary, or other criminal actions should be reported to the Security Office and local law enforcement for investigation and disposition.

### Behavior Intervention Team (BIT)

The Behavioral Intervention Team (BIT) has been established to serve as a central network focused on prevention and early intervention in college situations involving students showing signs of serious distress or engaging in harmful or disruptive behaviors. The Team develops strategies for, and provides referrals or consultations to, college resources when concerns arise about students' well-being or when there is behavior that seems potentially harmful to self and/or others or may be disruptive or threatening. This Team will regularly assess situations in the

college community, monitor students for an appropriate period of time, and will recommend actions in accordance with existing college policies.

To reach a BIT Team member, please contact (608) 757-7660.

## Security of and Access to BTC Facilities

The college has Campus Security; however, they do not have arrest powers. Security officers have the authority to ask persons for identification and to determine whether individuals have lawful business at the college. College security officers have the authority to enforce college and administrative policies as well as the Student Code of Conduct.

The college uses local law enforcement agencies that have jurisdiction over the campuses and center to investigate and enforce ordinances and criminal laws.

Access to and use of BTC facilities is governed by institutional policies and local statutes. Access to facilities is limited to BTC students, faculty, and staff for work, education, or other related purposes. Outside groups may use the facilities with special permission in accordance with district policy. Loitering or wandering through the facilities for unapproved reasons is prohibited.

## Criminal Offense Statistics at BTC Facilities

Blackhawk Technical College prepares an Annual Security Report in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act, as well as Wisconsin state statutes. A copy of this report may be found at [www.blackhawk.edu/safety](http://www.blackhawk.edu/safety). A copy can also be obtained in the Safety and Security Office.

## Sex Offender Registry

Federal law requires BTC to provide details on where students can obtain information about registered sex offenders in the state or community. The Wisconsin Sex Offender Registry is maintained by the Wisconsin Department of Corrections. Information is available on the department's website: <http://www.widocoffenders.org>.

## Consensual Relations

Positive relationships between students and staff at BTC enrich the college environment and are encouraged. It is natural that interaction between individuals in an academic setting may lead to personal friendships. Personal friendships do not pose problems as long as they do not interfere with academic decisions. However, a consensual romantic or sexual relationship between a student and a staff member may be exploitative and create the appearance of a conflict of interest.

Therefore, students and staff are discouraged from entering into a consensual romantic or sexual relationship while the student is currently enrolled in the staff person's class or when the student is receiving guidance from the person.

As a student you are urged, for your own protection, to refrain from developing a relationship of a sexual or romantic nature with BTC staff. If you become involved in such a relationship, you are encouraged to contact the BTC Title IX Officer located on Central Campus. (*See policy below for contact information*)

## Discrimination and Harassment Policies

BTC, through its commitment, will affirmatively attempt to provide an environment free of harassment for all employees and students. Harassment of students and employees of BTC is unacceptable and will not be tolerated. BTC deplores such conduct as an abuse of authority.

BTC, in compliance with Title VI and VII of the 1964 Civil Rights Act as amended, Title IX of the 1972 Education Amendments Act, Section 504 of the Rehabilitation Act, the Americans with Disabilities Act of 1990, and the Americans with Disabilities Amendments Act of 2008, prohibits harassment by supervisors, co-workers, students, and non-employees on the basis of sex, race, national origin, disability, or other protected status person.

BTC has no tolerance for discriminatory, harassing, or racist behaviors. Specifically, the Blackhawk Technical College District Board actively complies with all state and federal equal opportunity and affirmative action laws, rules, executive orders, and policies. It is the policy of BTC not to discriminate in employment on the basis of age, race, creed, color, religion, handicap, marital status, sex, national origin, ancestry, arrest record, conviction record, sexual orientation, or membership in the National Guard, state defense force, or any reserve component of the military forces of the United States or this state. BTC does not discriminate against students on the basis of race, color, creed, religion, sex, national origin, disability, ancestry, age, sexual orientation, pregnancy, marital status, or parental status. Discrimination means the difference in treatment in any service, program, course, or facility of BTC on the basis of these protected statuses.

Inquiries regarding equal opportunity and possible discrimination may be directed to one of the following individuals. Their area of expertise, office location at the Central Campus, and telephone number are noted:

**Brian Gohlke**, *Affirmative Action Officer, Administration Center*  
Phone: (608) 757-7773

**Lynn Neitzel**, *Title IX Officer*  
Phone: (608) 743-4508

**Renea Ranguette**, *ADA Officer, Administration Center*  
Phone: (608) 757-7700

*Your written concerns can be sent to any of these individuals at:*

*Blackhawk Technical College  
6004 South County Road G  
P.O. Box 5009  
Janesville, WI 53547-5009*

Harassment is unwanted, deliberate, or repeated unsolicited comments, slurs, demeaning references, gestures, graphic materials, physical contacts, solicitation of favors, advances, or other adverse treatment based on a protected group status when:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, student status, or academic participation.
2. Submission to or rejection of such conduct by an individual is used as the basis for employment or academic decisions affecting an individual.

3. The conduct has the purpose or effect of substantially creating an intimidating, hostile, or offensive environment which tangibly affects or interferes with an individual's job performance or other employment or academic opportunities.

Alleged acts of harassment and discrimination may be violations of equal employment or educational opportunity policies under which BTC operates. Discipline may be imposed for violations of this policy in accordance with the procedures outlined in The Student Disciplinary Procedure.

## Accident or Illness Emergency Procedures

BTC uses the professional medical treatment system available in the community to respond to injuries and illness. BTC will provide basic medical first aid but will not treat any illness or injury. Rather, you will be referred to an appropriate medical treatment facility. If you refuse to seek follow-up medical treatment after it has been recommended by a staff member, you will be asked to sign a waiver corroborating this decision.

You will be responsible for your own transportation to a medical facility. However, should the injury or illness be considered an emergency an ambulance will be requested. You will be responsible for the cost of the ambulance. Under no circumstances will BTC staff transport you for treatment. All accidents, regardless of the seriousness, should be reported to security.

Clean-up after an accident or illness should be left to the BTC maintenance and custodial staff. You should not attempt to clean up blood, vomit, or other body fluids without proper safety equipment. If clean-up is necessary, you should go to the Welcome Center (information desk) at the main entrance and request maintenance/custodial staff to clean up the area.

In the case of emergency, dial 911. Classroom and hallway assistance phones can be used to report an emergency by following the posted instructions. Dial 911.

## Career Services and Leadership Development

Blackhawk takes great pride in offering a wide range of career and professional development services.

Resources include WisconsinTechConnect (<https://www.wisconsintechconnect.com/>) (the Wisconsin Technical College student and alumni employment website), individual appointments on resume writing, and interviewing skills, workshops, and internship search strategies. The Certificate of Professional Development is a non-credit program that allows students and alumni to develop and improve professional skills which will provide them the edge in their job search. Computers (with access to the Internet) are also available for resume preparation and job searches. Career Services assistance is available within the Student Success Center (Room 2200), Monday through Friday, 8 a.m. to 4:30 p.m., on the Central Campus. These services are also available at all other BTC sites. Prospective graduates are encouraged to contact Alicia Acker – Career Services Specialist at [aacker@blackhawk.edu](mailto:aacker@blackhawk.edu) or (608) 743-4423 for more information.

## Computers on Campus

BTC students have access to approximately 1,600 computers at our various locations. In addition to over 35 computer-equipped classrooms, there are open computer labs on all campuses.

All BTC facilities are equipped with wireless Internet access, so students may bring their own devices.

IT Help Desk support is available both during and between semesters, and can be reached at (608) 757-7711 or in room 2506 at Central Campus. Typical support hours are below.

### Fall/Spring Semester Support Hours:

Monday-Thursday: 7:30 a.m. - 9:00 p.m.

Friday: 7:30 a.m. - 5:00 p.m.

Saturday: 8:00 a.m. - 1:00 p.m.

### Between Semesters:

Monday-Friday: 7:30 a.m. - 5:00 p.m.

### Summer Semester Support Hours:

Monday-Thursday: 7:30 a.m. - 7:00 p.m.

Friday: 7:30 a.m. - 5:00 p.m.

## Computer Use

Computers and computer systems owned by BTC are to be used only for academic/instructional activities, and other official college business. They are intended for use by BTC staff, students and customers.

Students will be provided login identification and a temporary password at the time of the initial student registration. Usernames and passwords are unique to individuals and must not be shared. Every student is responsible for any activity under his/her username and password. Therefore, students should always log off a computer after each use. Computer users will be prompted every 180 days to change passwords.

Any use of college computer equipment and systems for illegal, unethical or fraudulent purposes is prohibited. Displaying on college equipment or systems, or transmitting or distributing any material that is demeaning to persons of a particular gender, race, creed, ethnicity, disability, sexual orientation or other protected class is considered harassment and is prohibited.

Students who violate computer use policies may lose privileges to the college equipment and systems, and/or may be subject to disciplinary action. BTC reserves the right to monitor the computer system and computer network use.

## Fitness Center

The Blackhawk Fitness Center is located in the Central Campus and features over 16 pieces of modern fitness equipment. Credit students qualify to receive a free Fitness Center membership because of a donation by the Student Government Association. These funds came from segregated fees, which every Blackhawk credit student pays in addition to regular tuition. Non-credit student memberships cost \$25 per year. Blackhawk employees can use the facility for \$50 per year. The fee is non-refundable and is valid from September-July of each year.

*\*prices subject to change*

## Food Service

Courtyard Grill on the Central Campus is open Monday through Friday from 11:00 a.m. to 1:00 p.m., offering a wide variety of freshly cooked meals, snacks, and beverages. In addition, the campus also hosts a Starbucks where students can order an assortment of gourmet coffee, breakfast pastries and other types of drinks. Starbucks is open from 8:00 a.m. to 3:00 p.m. Monday through Thursday and 7:30 a.m. to 11:00 a.m. on Fridays. All other Blackhawk campuses have vending services to support student needs.

Hours for Courtyard Grill and Starbucks are subject to change.

## Library

The Blackhawk Technical College Library is located at Central Campus as part of the Student Success Center. Students at all Blackhawk locations have full access to library resources 24/7 via the MyBTC student portal. Staff is available on Central Campus to help support information literacy, research, reference, citations, and more.

For information about Library resources, times of operation, services, staff, and a complete list of library hours—please call the circulation desk (608) 757-7671, or visit the library web page: <https://blackhawk.edu/Student-Resources/Academic-Support-Tutoring/Library-Services> (<https://blackhawk.edu/Student-Resources/Academic-Support-Tutoring/Library-Services/>)

## Lockers

A limited number of lockers are available for students on Central Campus. Lockers may be rented from the Student Services Office located inside the main entrance of Central Campus.

Students may rent lockers on a semester or yearly basis for \$3.00 per semester (Summer, Fall or Spring) or \$5.00 per year. Policies related to locker rental and use may be obtained from Student Services.

For more information regarding lockers at other BTC sites, please contact the front desk at that site.

## Lost and Found

The Lost and Found is located at the Security Office (Room 2105) on Central Central Campus. It is generally open from 7:30 a.m. to 10 p.m. Monday through Thursday and from 7:30 a.m. to 4:30 p.m. on Fridays and 7:30 a.m. to 4 p.m. on Saturdays.

Anyone finding an item should turn it into the Security Office. If you have lost an item, please file a report with security so, if found, the item can be returned. If no one is available in the Security Office, please see the attendant in the Welcome Center to assist you. All items will be stored for 90 days and then donated to charity.

For more information regarding lost and found at other Blackhawk sites, please contact the front desk at that site.

## Services for Students with Disabilities

In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act of 2008 (ADAAA), Blackhawk Technical College provides reasonable accommodations and support services to students with disabilities, students seeking Title IX pregnancy/parenting accommodations and students with temporary, non-chronic impairments.

Students are required to provide written documentation of their disability. Services that are available include, but are not limited to, testing accommodations, tutoring, note-taking, texts in an alternate format, sign language interpreters, and assistive technology. If you have a disability for which you are requesting accommodations, please contact Access & Accommodations at (608) 757-7796, deaf/hh call Relay 711. Please request accommodations at least three (3) weeks prior to the start of classes to ensure services are in place. Standards regarding course quality and academic progress must be maintained.

Transition Services are available to assist potential students with career exploration and developing a plan that outlines the steps that lead to a successful transition into BTC. Accommodations for the college placement test may be available. Transition Services can be coordinated by calling (608) 757-7796, deaf/hh call Relay 711.

BTC also provides accommodations for students and guests with disabilities participating in activities offered through BTC. If you require an accommodation, you should contact the Access & Accommodations Office at (608) 757-7796. Please request accommodations at least two (2) weeks prior to the event; however, requests with shorter notice will be provided whenever possible.

## Starfish

Starfish is part of student support services and located in MyBTC. The Starfish tool can assist students in making appointments with individuals and/or offices around campus. Students can also use the Starfish kiosks to keep track of their attendance in labs and time in appointments. Students can see their Success Network in Starfish and easily connect with faculty, advisors and other support staff and locate their contact information (i.e., phone number and email address).

Throughout the semester, the faculty will use Starfish to identify positive student behaviors through kudos or student attendance and/or other academic concerns through flags. The student's assigned academic advisor will be notified of any concerns via a flag within Starfish. The advisor will then contact the student to share resources to help keep the student on track (i.e., counseling, tutoring, academic planning, emergency financial assistance, time management, etc.).

## Progress Surveys, Flags, and Kudos

Students experiencing problems completing program or course requirements should seek help immediately. All faculty will complete an Early Alert Progress Survey through Starfish at the end of the second week of classes (need to note late start and different parts of term). Faculty identify attendance and/or other academic concerns early in the semester. The student's assigned academic advisor will be notified of the concern via a flag within Starfish. The advisor will then contact the student to share resources to help keep the student on track (i.e. counseling, tutoring, academic planning, emergency financial assistance,



time management, etc.). A Midterm Progress Survey will be distributed at the midterm and the same process will occur.

During the semester, if the faculty has concerns about a student, the faculty member can raise a flag in Starfish that will notify the student and the assigned academic advisor of the area of concern. The assigned advisor will again contact the student to share resources and/or create a plan for the rest of the semester. Faculty are encouraged to speak with the student first regarding the concern(s) and inform the student that the advisor will be contacting him/her.

Flags raised in Starfish either through Progress Surveys or throughout the semester will be cleared after the advisor has contacted the student. The advisor will identify how they closed the loop (i.e., student reached out to advisor, call made to student-no response, etc.). All interactions will be tracked in Starfish.

Faculty also have the ability to raise Kudos through Starfish and encourage the good work students are doing to progress in their class or college. Students are notified of these Kudos; no follow-up is needed. The use of Kudos is highly encouraged.

## Student Engagement

### Awards Program

The honors recognition program culminates in late April and is sponsored by the Career Services and Leadership Development Office. During the program, individuals are recognized for their academic achievements, participation in student organizations, and contributions within the college community.

### Fitness Center

The Blackhawk Fitness Center is located on the Central Campus and features cardio and strength training equipment. Credit students receive a free Fitness Center membership. All non-credit student memberships cost \$25 per year. Blackhawk staff can use the facility for \$50 per year. The fee is non-refundable and is valid from August to July of each year. The Fitness Center hours are 7:00 a.m. – 10:00 p.m. Monday through Thursday, 7:00 a.m. – 5:00 p.m. Friday, and 7:30 a.m. to 4:00 p.m. on Saturday.

### Peer Advisors

Peer Advisors are a select group of students who represent BTC, as well as their own programs, to our student body and local communities. They serve as Advising, Registration and Orientation (ARO) leaders, tour guides and assist with the many events that take place on campus. Peer Advisors have been trained to answer common advising questions and registration processes.

### Student Cupboard (<https://blackhawk.edu/Student-Resources/Student-Life/Student-Cupboard/>)

The BTC Student Cupboard provides supplemental food and other necessities for current students and their families who are in need. Our vision is to ensure no BTC student goes hungry because of a lack of income or access to food.

## Student Government Association (SGA)

The Student Government Association plans campus-wide social, recreational and educational activities. This committee is open to all students. Student members are involved in choosing entertainers for campus programs, and marketing and promoting campus-wide events. Students will gain professional experience in marketing, planning, negotiation, and communication.

## Student Organizations

Student organizations provide valuable experience to students by fostering leadership, personal development, career opportunity, and community relations. They are considered an integral part of the total education experience at Blackhawk. To learn more about student organizations, visit <https://blackhawk.edu/Student-Resources/Student-Life/Student-Organizations> (<https://blackhawk.edu/Student-Resources/Student-Life/Student-Organizations/>).

## Student Representative to the District Board

Blackhawk was one of the first technical colleges in Wisconsin to formally have a student representative to the Board. Typically the representative is the President of the Student Government Association or a designee. The student representative serves in a non-voting position and acts as the liaison between the District Board and the student body.

## Student Union

Launched during the 2019-2020 Academic Year, the Student Union is the perfect place to meet friends, play games, watch movies, study, or simply hang out.

Wisconsin Technical College System Student Ambassador

Each year, one student is selected as the WTCS Student Ambassador to represent Blackhawk. The ambassador attends several state-wide events throughout the year, is a spokesperson for the WTCS, and is often a featured speaker at the annual commencement ceremony.

Wisconsin Technical College System Student Showcase

The WTCS Student Showcase is held annually at the State Capitol Building to highlight academic excellence at the technical college. Each year, a student or group of students is selected from faculty nominations to participate in the showcase. Participants can highlight a class project, a service-learning initiative, or a community service project.

## Student Identification Cards

Identification cards are available to all Blackhawk students. The cards include the Blackhawk logo and address and student picture, name, and nine-digit identification number. The card also includes a bar code that allows students to access resources at the Blackhawk library and the Learning Resource Center in Monroe.

Students can have pictures taken and cards issued any time after they have registered for a course. Cards are issued at the Registration and Records Office on Central Campus, the Monroe Campus Learning Resource Center, or at our Advanced Manufacturing Training Center. In order for a Blackhawk student ID to be issued all students must present a valid picture ID and class schedule.



The first student ID is free. A \$5 fee will be assessed for any replacement cards issued.

## Student Insurance

### Insurance

Student insurance programs are available on an individual basis for interested students. Brochures describing the coverage are inserted in the registration materials, which each student receives prior to the beginning of the school term. Students desiring further information may contact Student Services Office on Central Campus.

## Telephones and Messages

Assistance phones are located throughout the hallways at Central and Milton campuses. These phones can be used to report an emergency by following the posted instructions. A courtesy phone is available in the lobby/lounge at Central, Monroe and CTS campuses for placing local calls only. Students are not allowed to use school office phones. Deaf/hh, please call through Relay 9-711. Only messages of an emergency nature will be taken at the Welcome Center and every reasonable attempt will be made to locate the student. Non-emergency messages will not be accepted. Students should inform families, child care providers, etc. of the above limitations and develop alternate arrangements in the event they cannot be located.

Student Services lobby phone is for emergency use only and a five-minute limit is strictly enforced.

The Welcome Center is not to be used for delivery purposes (i.e. key or lunch drop-off, or book pick-up).

## Transportation

**All credit students are assessed a \$20 transportation fee per semester.**

### Bus and Shuttle Transportation

BTC operates shuttles that connect all Blackhawk sites. The shuttle service is free-of-charge, but a current student ID must be provided at all times. A complete schedule is available at <https://blackhawk.edu/Locations#> (<https://www.blackhawk.edu/Portals/0/PDFs/Locations/BTCBusSchedule.pdf>) shuttle (<https://blackhawk.edu/Locations/#shuttle>).

Public transportation is offered between Janesville and Beloit. There are twelve stops each weekday at Central Campus between 6:00 a.m. (first stop at BTC is 6:15 a.m.) and 6:15 p.m. (last stop at BTC is 5:40 p.m.) The schedule has been coordinated with the transit companies so the stops coincide with class schedule to the degree possible. Bus schedules, fare information, routes, etc. are available at the Welcome Center on Central Campus. Bus service is provided Beloit Transit and Janesville Transit System.

### Parking

The Central Campus usually has adequate parking for everyone. Please observe parking restrictions as posted. Otherwise, you may park on a first-come, first-serve basis. Parking for the disabled has been reserved at several locations. Only persons with a valid disabled license plate or handicapped sticker issued by the Wisconsin Motor Vehicle Department

may park in those spaces. BTC cannot issue any kind of handicapped sticker.

There are designated parking areas set aside for special purposes such as motorcycles and the Rock County Sheriff Office's personnel. **There is no parking in driveways (unless otherwise posted) or on the paved areas adjacent to the buildings. These areas need to be kept open for emergency vehicles. Anyone parking in a restricted area without an appropriate license may receive a parking citation issued by the Rock County Sheriff's Department.**

On-site parking is available at the Beloit Public Library, Center for Transportation Studies, Monroe Campus, and the Advanced Manufacturing and Transportation Center in Milton. The rules noted above also apply to these locations.

## Tutoring and Learning Support

Blackhawk Technical College provides tutoring at no cost to enrolled students. The college offers:

- Open Lab Tutoring
- Online Tutoring
- Peer Tutoring

A variety of tutoring services and learning support are offered in the Student Success Center on the Central Campus. Students can receive instructor assistance, drop-in computer assistance, and space for and access to study groups. Services on Central Campus are available by drop-in or appointment. Services will gladly be provided at other Blackhawk locations by appointment. In addition, 24/7 online tutoring is available from any location that has an internet connection. For more information about Tutoring and Learning Support call (608) 757-7676 or visit <https://blackhawk.edu/Student-Resources/Academic-Support-Tutoring/Tutoring-Services> (<https://blackhawk.edu/Student-Resources/Academic-Support-Tutoring/Tutoring-Services/>).

## Weather-Related School Closings

On days when some or all of the campuses are forced to close due to emergencies or weather, a college-wide communication will be sent out to all BTC students via the SAFE Alert communications system (<https://www.blackhawk.edu/About/Safety-Security/SAFE-Alert/>) (the BTC emergency notification system). In addition, closing messages will be posted on [www.blackhawk.edu](http://www.blackhawk.edu) and on all college social media channels. We make every effort to notify area radio and TV stations by 6:00 a.m. for daytime classes and by 2:00 p.m. for evening classes.

*Please Note: BTC is listed as Blackhawk Technical College NOT Blackhawk Schools.*

For a listing of area radio and television outlets, visit <https://www.blackhawk.edu/About/Safety-Security/Emergency-Information> (<https://www.blackhawk.edu/About/Safety-Security/Emergency-Information/>).

# POLICIES AND PROCEDURES

Blackhawk's campus, academic and community policies define what the college expects from the students and what students may expect from the College. Policies are developed and approved through Blackhawk's governance system.

## Academic Forgiveness

Academic Forgiveness is designed to allow students a second chance regarding their academic performance.

Forgiveness based upon past academic performance – students can request Academic Forgiveness only once.

After at least a two-year continuous break from credit-based coursework at Blackhawk, a student may request Academic Forgiveness based upon past academic performance. The request will be reviewed after a return to the college and completion of at least twelve (12) college-level credits or more and an earned GPA of 2.0 or higher. If approved, grades of D or F for the courses from the prior attendance period will be removed from the student's GPA. However, the courses will remain on the official transcript, but will show a special code for Academic Forgiveness.

If a student is receiving financial aid, Satisfactory Academic Progress guidelines and policies may still apply.

## Academic Standards

The Blackhawk Technical College Standards for Academic Success define the requirements you must meet to maintain satisfactory academic progress if you have enrolled in an associate degree and/or technical degree program AND have enrolled in three credits or more during the term. These standards also establish a formal process to identify, notify and provide assistance if you fall below satisfactory academic standards.

Blackhawk calculates your academic standing twice a year: after the end of the fall and spring semesters.

## Good Academic Standing

To remain in good academic standing, you must maintain a minimum GPA of 2.0. Students who fail to meet this requirement will be subject to the following:

### Academic Warning

If you begin the semester in good academic standing, complete three or more credits and fail to meet a cumulative GPA of at least 2.0, you are placed on academic warning. You will receive an email notification from Registration and Records.

If you are enrolled in three or more credits, you must achieve a minimum 2.0 cumulative GPA to avoid being placed on academic probation. We strongly recommend that you contact your Academic Advisor to create a plan to help you keep on the path toward your goals.

If you complete three or more credits and achieve a minimum 2.0 cumulative GPA, you will return to good academic standing. You may not appeal your academic warning status.

### Academic Probation

If you begin the semester on academic warning, complete three or more credits and fail to meet a cumulative GPA of at least 2.0, you are placed on academic probation and will receive an email and written notification from Registration and Records. We will place a registration hold on your account, which prevents you from registering for classes.

You are required to meet with your academic advisor to develop an academic plan and to have the registration hold removed. If you take three or more credits and achieve a minimum 2.0 cumulative GPA, you will return to good academic standing. If you receive a term GPA of 2.5 or above but your cumulative GPA is still below a 2.0, you will return to Academic Warning. You may not appeal your academic probation status.

### Academic Dismissal

If you begin the semester on academic probation, complete three or more credits and fail to meet a cumulative GPA of at least 2.0, you are placed on academic dismissal. We will place a registration hold on your account, which prevents you from registering for classes. If you are registered for the upcoming term, your classes will be dropped.

If placed on academic dismissal, you will be notified in writing from Registration and Records and provided information about the appeal process. If you are academically dismissed from Blackhawk, you may not re-enroll in credit classes for one academic year, but you may be considered for reinstatement if an appeal is submitted and approved.

### Re-Enrollment After Academic Dismissal

If you are dismissed and wish to re-enroll after one year, you must apply for admission (or readmission) to a program. Upon re-acceptance, you will be placed on academic probation and are required to meet with your assigned academic advisor before the semester begins.

If you take three or more credits and achieve a minimum 2.0 cumulative GPA, you will return to good academic standing. If you receive a term GPA of 2.5 or above but your cumulative GPA is still below a 2.0, you will return to Academic Warning.

### Appeal Process

If you believe extenuating circumstances prevented you from maintaining satisfactory academic progress, you may submit an appeal, which includes the following:

- An explanation of why you did not maintain academic progress and what has changed in your situation to enhance future academic success.
- If applicable, include third-party documentation to support your reasons for not maintaining academic progress.
- Steps you have taken to remedy these impediments and to prevent them from occurring again.
- Identify any BTC resources available to help maintain academic progress.
- A personal plan of action to ensure academic progress will be met in future semesters.

The appeal will be reviewed by the College appeals committee, and you will be notified of the decision in writing. If an appeal is granted, the student will be placed on academic probation. Successful appeal of an academic dismissal does not guarantee reinstatement of financial aid, if applicable. The appeal form can be found at

<https://blackhawk.edu/Portals/0/PDFs/Student%20Resources/AcademicProgressAppealForm.pdf>

Deadlines for submitting an appeal and review of all appeals will occur prior to the beginning of the semester. The appeals committee decision is final.

Deadline for appeals: Apr. 15 (to be reinstated for summer semester), July 15 (to be reinstated for fall semester), Dec. 15 (to be reinstated for spring semester).

## Attendance

Attendance is critical to a student's academic progress. Students are expected to be present, prepared, and an active participant. Students should discuss absences with instructors. The attendance policy for a particular course will be shared in class and included in the course syllabus.

If you are receiving financial aid, be aware that failure to attend classes may affect your financial aid.

### Non-Attendance (No Show Policy)

Failure to actively participate in any course, during the first 10% of a course's actual hours of instruction, is considered non-attending. This includes participation in online courses beyond logging into the course. If an instructor reports a student as non-attending, the student is removed from the course and notified of their removal via their Blackhawk student email. At this point, students are no longer considered registered in that course and cannot start attending unless written approval from the instructor is received. If permitted, the student must re-register by contacting Registration and Records. Removal from a course due to not attending may affect financial aid.

Students are responsible for the cost of any course they are registered in after the start of the semester. Please refer to the Blackhawk event calendar for important dates regarding semester deadlines.

## Background Checks

### Wisconsin Caregiver Background Check

Wisconsin law requires background checks of persons who provide care for others or have access to people who receive care. This law applies to Blackhawk Technical College students in the following programs:

- Dental Assistant
- Diagnostic Medical Sonography & Vascular Technology
- Early Childhood Education
- Emergency Medical Technician
- Medical Assistant
- Medical Laboratory Technician
- Nursing
- Nursing Assistant
- Pharmacy Technician
- Phlebotomy
- Physical Therapist Assistant
- Radiography
- Surgical Technology

Criminal convictions as well as arrests and/or pending charges may limit a student's ability to participate in clinical/practicum courses. Further, a criminal background could have a negative impact on certification examination eligibility and employability in health care facilities.

Once completed, Blackhawk Technical College, its employees, and agents will provide a copy of the student's signed State of Wisconsin Background Information Disclosure (BID) form and information obtained from the Caregiver Background Check to assigned clinical/practicum affiliation sites. This information will be used in determining eligibility and suitability for clinical placement.

### Criminal Justice Background Checks

For the Law Enforcement Academy, Basic Corrections Academy and Secure Juvenile Detention Academy, the Department of Justice will complete background checks unless the candidate has already been hired by a law enforcement/corrections agency. If they have already been hired, the agency that sends them to the academy will complete the background check.

Additionally, Law Enforcement Academy candidates' driving records will be checked to determine if the college will allow them to operate college owned vehicles.

## Children on Campus

For the purpose of this regulation, "children" are defined as minors under the age of 18 who are not enrolled in a Blackhawk Technical College course or program.

Children without supervision (unattended) may disrupt the educational process or work setting, and possibly create a safety hazard for the children themselves or for others on the College campus.

It is the intent of Blackhawk Technical College to create and maintain a learning environment that is conducive to the success of students. Disruption of, or distraction in, that environment is a serious matter in which the good of all students needs to be considered. Clearly, having children in this environment interferes with the primary function of the College.

At Blackhawk Technical College, children should not accompany registered students, training participants, or college faculty/staff to classes, seminars, or other educational activities. If a child is brought to a session by a student/participant, the instructor/staff is authorized to ask the student/participant to leave that session.

Under no circumstances are children permitted to be left unattended on the College premises or at College functions (including parking lots and surrounding areas). If a child is left unattended, staff should immediately notify the appropriate division or site manager. The division or site manager will proceed with contacting College Security, who will make every attempt to resolve the issue but, if unable to do so, will refer the matter to the proper authorities (i.e. the Sheriff's Office).

This regulation is in no way intended to discourage or prohibit special events, activities, and programs aimed at involving children with the College.

## Student and Community Complaint Procedure

Blackhawk Technical College provides opportunities for students and members of the community to register complaints by filling out a Student and Community Complaint Form (<https://tinyurl.com/BTC-Complaints>) (<https://tinyurl.com/BTC-Complaints/>). The Student and Community Complaint Form provides an avenue to submit a concern regarding any area at the College. The College will address and systematically process all student and community complaints in a timely manner.

The complete Complaint Procedure can be found at <https://blackhawk.edu/Student-Resources/Complaint-Process> (<https://blackhawk.edu/Student-Resources/Complaint-Process/>).

## Course Age Limit Policy

### Policy on Age Limits on Courses

Blackhawk Technical College (BTC) does not apply blanket age limits to courses for the purpose of BTC program completion, transfer in, meeting selective admissions, program's ranking/entrance procedures, or meeting program requirements in award completion. Approved age limits on courses will be related to the competency(ies) students/graduates must demonstrate in the field, employment, and other measures such as certification examinations.

Courses included in an earned degree, whether from BTC or another institution, and transcripts showing 15 or more earned credits (passed with a C or higher) in the last 10 years are exempt from the age limits listed below.

Approved time limits on the applicability of courses to program admission and completion are available in program admission documents and on program-specific web pages. The college does reserve the right to deny prior coursework if significant changes in the area of study have occurred, or if current knowledge is necessary for student success. For example, computer coursework or allied health courses may have changed significantly and may no longer satisfy degree requirements due to changes in technology or professional practices.

#### APPROVED AGE LIMITS FOR TRANSFER IN OF COURSES

<u>BTC Program and Courses approved by Dean)</u>	<u>Year Limit (date)</u>
All Math and Science Courses	5 years
All Clinical and Lab. Courses (Health Science)	1 year
CST/MITS—Computer Service Technician/ Manufacturing Information Technician Specialist	5 years
Criminal Justice Studies	5 years
IT-Network Specialist	5 years
IT-Web Software Developer	5 years
MLT—Medical Laboratory Technician	5 years
Nursing Assistant	5 years, unless currently employed as a Nursing Assistant

## Discrimination and Harassment Policies

BTC, through its commitment, will affirmatively attempt to provide an environment free of harassment for all employees and students.

Harassment of students and employees of BTC is unacceptable and will not be tolerated. BTC deplores such conduct as an abuse of authority.

BTC, in compliance with Title VI and VII of 1964 Civil Rights Act as amended, Title IX of the 1972 Education Amendments Act, Section 504 of the Rehabilitation Act, the Americans with Disabilities Act of 1990, and the Americans with Disabilities Amendments Act of 2008, prohibits harassment by supervisors, co-workers, students, and non-employees on the basis of sex, race, national origin, disability, or other protected status person.

BTC has no tolerance for discriminatory, harassing, or racist behaviors. Specifically, the BTC District Board actively complies with all state and federal equal opportunity and affirmative action laws, rules, executive orders, and policies. It is the policy of BTC not to discriminate in employment on the basis of age, race, creed, color, religion, disability, marital status, sex, national origin, ancestry, arrest record, conviction record, sexual orientation, or membership in the National Guard, state defense force, or any reserve component of the military forces of the United States or this state. BTC does not discriminate against students on the basis of race, color, creed, religion, sex, national origin, disability, ancestry, age, sexual orientation, pregnancy, marital status, or parental status. Discrimination means the difference in treatment in any service, program, course, or facility of BTC on the basis of these protected statuses.

Inquiries regarding equal opportunity and possible discrimination may be directed to one of the following individuals. Their area of expertise, office location at the Central Campus, and telephone number are noted:

- Brian Gohlke, Affirmative Action Officer Administration Center, (608) 757-7773
- Renea Ranguette, ADA Officer Administration Center, (608) 757-7700
- Lynn Neitzel, Title IX Coordinator, (608) 743-4508
- Written concerns can be sent to any of these individuals at Blackhawk Technical College, 6004 South County Road G, P.O. Box 5009, Janesville, WI 53547-5009

Harassment is unwanted, deliberate or repeated unsolicited comments, slurs, demeaning references, gestures, graphic material, physical contact, solicitation of favors, advances, or other adverse treatment based on a protected group status when:

- Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, student status, or academic participation.
- Submission to or rejection of such conduct by an individual is used as the basis for employment or academic decisions affecting an individual.
- The conduct has the purpose or effect of substantially creating an intimidating, hostile, or offensive environment that tangibly affects or interferes with an individual's job performance or other employment or academic opportunities.

Alleged acts of harassment and discrimination may be violations of equal employment or educational opportunity policies under which BTC operates. Discipline may be imposed for violations of this policy in accordance with the procedures outlined in the Student Disciplinary Procedure.

## Grading Procedures

Your grade point average (GPA) is computed by multiplying the point value of each grade by the credit value designated for each course. The sum of these figures is divided by the number of credits. A minimum of 2.0 GPA is needed to maintain satisfactory academic standing and is required for graduation. GPAs are figured on a 4.0 scale. The point equivalents are listed below. It is the student's responsibility to consult with his/her instructors as to his/her progress.

### Grade Point Values

A	AB	B	BC	C	D	F
4.0	3.5	3.0	2.5	2.0	1.0	0.0

### Grade Chart Example

Course No. Example	Course Name	Letter Grade	Credit Hours	Multiplied by	Numeric Grade Value (Chart Above)	Grade Points
XXXXX1	English - First Year Composition	A	3	x	4.00	12.00
XXXXX2	English - Technical Writing	AB	3	x	3.5	10.5
XXXXX3	Small Group Communication	B	3	x	3.0	9.00
XXXXX4	Critical & Evaluative Reading 1	A	3	x	4.0	12.00
XXXXX5	The Mathematics of Design	A	3	x	4.00	12.00
XXXXX6	Economic: BC in American Society	BC	3	x	2.5	7.50
XXXXX7	Contemporary Art	A	3	x	4	12.00
XXXXX8	General Biology (Non-Majors)	C	4	x	2.0	8.00
TOTALS			25			83
83 total points / 25 total credit hours = 3.32 GPA						

## Grade Appeals Process

Students who have complaints related to course grades should address those complaints first with the instructor of the course. If the student is not satisfied with the resolution, the student may then go to the appropriate program dean. If a resolution is not achieved with the appropriate program dean, a student may submit a formal complaint via the online Student and Community Complaint Form located at <https://tinyurl.com/BTC-Complaints> (<https://tinyurl.com/BTC-Complaints/>).

## Mental Health Policy

Blackhawk is committed to the success of all students including those who suffer mental health conditions, and we will:

- Acknowledge but not stigmatize mental health issues;
- Encourage individuals to seek help or treatment that they may need;
- Ensure that personal information is kept confidential;
- Refrain from discrimination against a person with mental illnesses; and
- Provide reasonable accommodations in accordance with Section 504 of the Rehabilitation Act of 1973 and the ADA Amendment Acts (ADAAA).

When inappropriate student behavior is identified on campus and in the classroom, the goal is to assist students in accessing resources that will help them meet expected College behavioral standards and success academically, personally and socially.

A student's status at the College will be reviewed when the student exhibits concerning behavior in which their physical or psychological functioning is so impaired that their condition or conduct is detrimental to the health or educational progress of other campus community members or the educational process of the institution.

In order to assist the College in determining what action to take, the Behavior Intervention Team (BIT) will be called on to review the student's status at the College. The status review may result in requiring the student to provide information from an appropriately licensed health care provider regarding the student's health and functioning, and a professional opinion as to the student's ability to meet the requirements of the College environment.

Furthermore, if requested by the Director of Student Services or designee, the student must provide written consent for the health care provider to discuss the student's condition and prognosis with appropriate College officials or agents. The student also agrees to comply with any other reasonable request from the College that may assist the College in its review of the matter. The final determinations for withdrawal and readmission, or other actions, shall be at the sole discretion of the College and for reasons deemed satisfactory to the College. Such action by the College may include, but is not limited to, the following:

- Restricting the student from contact with specified individuals.
- Restricting the student from certain portions of the campus.
- Restricting the student from involvement in specified organizations, events, or activities.
- Withdrawing the student from a specified class or classes.
- Not allowing the student to remain enrolled unless the college determines that the student's condition or conduct no longer poses a



threat to himself or others or that the student will not act in a manner that is detrimental to the best interests of the college.

- Not allowing the student to continue his/her enrollment in a subsequent term in the case where the student has completed an academic term.
- Withdrawing the student from the College. The involuntary withdrawal of a student can be treated as a withdrawal for health reasons and not as a violation of the student conduct code.
- Following this policy does not mean that the student will necessarily be exempt from the regular disciplinary actions associated with the behavior in question according to the rules and procedures of the Student Code of Conduct.

Students receiving any involuntary (or voluntary) withdrawal due to health reasons must receive permission from the College to re-enroll.

After any determination of the student's status is completed and reported to the student via certified mail with delivery confirmation with a copy of this policy (or hand-delivered), the student will have 48 hours from the date of the delivery confirmation to request a review of the finding. The request must be made in writing/email to the Director of Student Services. The review and determination by the Director (or designee) will be final and non-appealable.

Please contact the Executive Director of Student Services regarding any questions about the guidelines set forth above.

## Refund Policy

### Refund Policy

In order to receive a refund, except in cases when Blackhawk cancels or discontinues a course, a student must request a refund. This also applies to drops due to non-attendance. Blackhawk will issue the refund within two weeks of a request.

Exceptions to the Refund policy are considered on rare occasions for legitimate extenuating circumstances— situations beyond your control. These may include serious illness or hospitalization of you or your immediate family, death of an immediate family member, military activation or deployment. A tuition refund appeal is granted at the discretion of the College.

To qualify for an exception, you must submit an Exception to the Refund form, along with supporting documentation, to the Registration and Records Office within one calendar year of the semester end date. Exceptions are reviewed and processed at the end of each month.

Refunds will be issued in accordance with the following state guidelines:

### 100% Refund

If a student drops any course before the first class meeting, 100% of the fees shall be refunded— Excluding non-refundable fees.

If a student drops a course before or at the time 10% of the course's potential hours of instruction have been completed and adds another course on the same day, 100% credit will be received for all applicable student tuition and fees for the dropped class.

### 80% Refund

Eighty percent of all applicable student tuition and fees are to be refunded if the application for refund is made before or at the time 10% of the course's potential hours of instruction have been completed— Excluding non-refundable fees.

### 60% Refund

Sixty percent of all applicable student tuition and fees are to be refunded if the application for refund is made after 10% but before more than 20% of the course's potential hours of instruction have been completed— Excluding non-refundable fees. (A grade of "W" will appear on the student transcript.)

### 0% Refund

No refund is to be made if the application for refund is made after 20% of the course's potential hours of instruction have been completed. (A grade of "W" will appear on the student transcript.)

## Religious Belief Accommodations

BTC will attempt to minimize conflict between your academic obligations and sincerely held religious beliefs. Reasonable accommodations will be made so that examinations and other academic requirements do not unnecessarily interfere with your observation of religious holidays.

Observation of a religious holiday does not exempt you from any course requirement, but allows you an opportunity to complete the assignment through an alternate means as arranged with your course instructor(s).

The following procedures will be used to set up reasonable accommodations for a religious holiday:

1. Submit a written request to your course instructor(s) within the first ten (10) days of the class. The request will advise the instructor(s) of the specific date of the observation.
2. The instructor(s) will have ten (10) school days to respond to your request, in writing, outlining the accommodations that will be made.
3. You should remind the instructor(s), in writing, of the religious observation five (5) school days in advance of the anticipated absence.
4. The instructor(s) may provide you with a make-up assignment for the day absent. The instructor(s) are not obligated to schedule a make-up assignment before the regularly scheduled requirements are due.

Conflicts between your observation of a religious holiday and completion of academic requirements should be resolved informally between you and your instructor whenever possible. If the issue cannot be resolved informally, a formal grievance complaint may be filed.

## Repeating Courses

Students may choose to repeat a course to gain additional knowledge or improve a previous performance. Some exceptions may apply, specifically to health-related programs. Students may be required to obtain approval prior to repeating "core" courses in these programs from the Dean or Division Administrator. For repeated coursework up to 12 credits, the original grade points and units will be excluded from the GPA calculation. Only the repeated points and credits will be included in the GPA, regardless of the previous grades earned. As an exception, should a grade of "W" be earned for a repeated course, the previous grade earned



will be calculated in the student's GPA. Both grades will remain on the transcript. For repeated coursework beyond 12 credits, both the grade points and credits from original attempts and the repeated attempt(s) will be used in calculating the grade point average. It is advisable to retake courses in which low grades were earned as students cannot graduate with less than a 2.0 GPA their program.

BTC does not permit a single college-level course to be taken more than three (3) times. Students failing to pass a course after three (3) attempts are required to discontinue the program and designate an alternate program under the guidance of an Academic Advisor. Additional policies exist regarding financial aid (see Financial Aid Standards of Academic Progress policy). Repeating courses may affect financial aid.

## Retraining Guarantee Policy

The education and training offered at BTC is designed to enable students to acquire job entry occupational skills needed for full participation in the workforce. BTC stands behind the training provided and will guarantee to provide at least six (6) additional credits of retraining, at no cost to the student, under the following conditions:

- The student's employer certifies that target job competencies are lacking as specified in the educational program normally expected of a job entry-level employee, or
- The student has not secured employment within six months following graduation.

To be eligible for the guaranteed retraining, a student must have successfully completed and graduated from a one-year technical diploma, two-year technical diploma, or associate degree program. In addition, a student must have registered for services provided through BTC's Career Services located in the Student Success Center and actively pursued employment in their occupational field or a related field. Other guidelines may also apply. For more information on BTC's Guaranteed Retraining policy, contact the Student Services Office at (608) 757-7713.

## Smoke/Tobacco Free Campus

For the health and well-being of everyone using BTC's facilities, smoking and the use of any type of tobacco product (including electronic cigarettes) is NOT PERMITTED in any of the buildings. Smoking outside of the buildings is allowed, but only in the areas designated for that purpose. Smokers should only use the designated areas set aside for tobacco use and the receptacles located at those areas.

## Student Code of Conduct Procedures

### Charges and Student Conduct Hearings

Any member of the College community may file an incident report that alleges student(s) violation of the Student Code of Conduct. The student(s) will be notified in writing of the alleged violation and directed to the Conduct Officer who will determine the hearing process. An incident report should be submitted as soon as possible after the event takes place, preferably within forty-eight (48) hours of the incident.

1. The Conduct Officer, as appropriate, reviews the referral to see if it appears there may have been a violation of the Code. If so, the student is notified and asked to meet with the Conduct Officer to discuss the incident. Most cases are resolved through this

meeting, and if the Conduct Officer and the student can reach an agreement about what happened, and if the student is willing to accept responsibility and any appropriate sanctions. In cases where the student chooses not to participate, or where an agreement is not reached, normal hearings will occur, including a hearing if necessary. If the allegations are admitted, then the matter may be resolved administratively by mutual consent of the parties involved. Such disposition shall be final with no subsequent proceedings. There is no appeal. If the allegation(s) is not admitted, then the Conduct Officer shall determine, based upon a review of the accused student's previous conduct history and the specific nature of the violation, whether to refer the case to the Student Conduct Board.

2. All allegations shall be presented to the accused student in written form. The Student Conduct Board Hearing shall convene not less than three, nor more than ten calendar days after the student has been notified. Maximum time limits for scheduling of the Student Conduct Board Hearings may be extended at the discretion of the Conduct Officer.

3. The Conduct Officer may, at his/her discretion, conduct an administrative hearing of a case according to the procedures as outlined in Article 1, section 3 above.

4. A Student Conduct Board shall conduct student conduct hearings. The Board will consist of nine (9) members: two (2) college administrators, two (2) non-academic staff members, two (2) faculty members, two (2) students, and the Conduct Officer. When student conduct hearings are conducted, only five (5) members will be present, one from each area (i.e. 1 college administrator, 1 faculty, etc.). Student Conduct Hearings shall be conducted according to the following guidelines:

- a. Student Conduct Hearings are confidential and as such shall be conducted in private.
- b. The complainant, accused student, and their advisors, if any, shall be allowed to attend the entire portion of the Student Conduct Hearing at which information is received (excluding deliberations). Admission of any other person to the Student Conduct Hearing will be at the discretion of the Conduct Officer.
- c. In Student Conduct Hearings involving more than one accused student, the Conduct Officer, at his/her discretion may permit the Student Conduct Board Hearings concerning each student to be conducted either separately or jointly.
- d. The complainant and the accused student have the right to be assisted by an advisor of their choice and at their own expense. The advisor must be a member of the College community and may not be an attorney. The complainant and/or the accused student is responsible for presenting his/her own information, and therefore, advisors are not permitted to speak or to participate directly in any Student Conduct Hearing before a Student Conduct Board. A student should select an advisor whose schedule allows attendance at the scheduled date and time for the Student conduct hearing because delays will not normally be allowed due to the scheduling conflicts of an advisor. If an accused student

is also the subject of a pending subsequent criminal matter arising out of the same circumstances, s/he may be allowed to have an attorney serve as his/her advisor, at his/her own expense, to behave in the same manner as any other advisor.

e. The complainant, the accused student, and the Student Conduct Board may arrange for witnesses to present pertinent information to the Student Conduct Board. The College will try to arrange the attendance of possible witnesses who are members of the College community, if reasonably possible, and who are identified by the complainant and/or the accused student at least two (2) weekdays prior to the Student Conduct Hearing. Witnesses will provide information to and answer questions from the Student Conduct Board. The accused students and/or complaint(s) to be answered by each other or by other witnesses may suggest questions. The Student Conduct Board will conduct this with such questions directed to the chairperson, rather than to the witness directly. This method is used to preserve the educational tone of the hearing and to avoid the creation of an adversarial environment. Questions of whether potential information will be received shall be resolved at the discretion of the chairperson of the Student Conduct Board.

f. A Student Conduct Board at the discretion of the chairperson may accept pertinent records, exhibits, and written statements (including Student Impact Statements) as information for consideration. All procedural questions are subject to the final decision of the chairperson of the Student Conduct Board.

g. Pertinent records, exhibits, and written statements (including Student Impact Statements) may be accepted as information for consideration by a Student Conduct Board at the discretion of the chairperson.

h. All procedural questions are subject to the final decision of the chairperson of the Student Conduct Board.

i. After the portion of the Student Conduct Hearing concludes in which all pertinent information has been received, the Student Conduct Board shall determine (by simple majority vote) whether the accused student has violated each section of the Student Code of Conduct as alleged. If the vote results in a tie, then the Conduct Officer will have the tie-breaking vote.

j. The Student Conduct Board's determination shall be made based on whether it is more likely than not that the accused student violated the Student Code of Conduct.

k. Formal rules of process, procedure, and/or technical rules of evidence, such as are applied in criminal or civil court, are not used in Student Conduct Board proceedings.

5. There shall be a single verbatim digital record of all questioning of witnesses and testimony in all Student Conduct Hearings before a Student Conduct Board. Deliberations of the Board will not be recorded. The record shall be the sole property of the College.

6. The Conduct Officer shall hold all recordings in a locked cabinet. The recording will be destroyed after the period for filing an appeal has passed and/or the final appeal has been adjudicated.

7. If an accused student, with notice, does not appear before a Student Conduct Board Hearing, the information in support of the charges shall be presented and considered even if the accused student is not present. A finding may be filed in absentia.

8. The Student Conduct Board may accommodate concerns for personal safety, well-being, and/or fears of confrontation of the complainant, accused student, and/or other witnesses during the hearing by providing separate facilities, by using a visual screen, and/or by permitting participation by telephone, videophone, closed-circuit television, video conferencing, videotape, audiotape, written statement, or other means, where and as determined in the sole judgment of the Conduct Officer to be appropriate.

## Sanctions

1. The following sanctions may be imposed upon any student found to have violated the Student Code of Conduct:

a. Warning – a notice in writing to the student that the student is violating or has violated the Student Code of Conduct.

b. Probation – a written reprimand for violation of specified regulations. Probation is for a designated period and includes the probability of more severe disciplinary sanctions if the student is found to violate any institutional regulation(s) during the probationary period.

c. Loss of Privileges – denial of specified privileges for a designated period.

d. Fines – previously established and published fines may be imposed.

e. Restitution – compensation for loss, damage, or injury. This may take the form of appropriate service and/or monetary or material replacement.

f. Discretionary Sanctions – work assignments, essays, service to the College, or other related discretionary assignments.

g. College Suspension – separation of the student from the College for a defined period of time, after which the student is eligible to return. Conditions for readmission may be specified.

h. College Expulsion – permanent separation of the student from the College with no opportunity to return.

i. Revocation of Admission and/or Degree – admission to or a degree awarded from the College may be revoked for fraud, misrepresentation, or other violation of College standards in obtaining the degree, or for other serious violations committed by a student prior to graduation.

2. Withholding Degree – The College may withhold awarding a degree otherwise earned until the completion of the process set forth in this Student Code of Conduct including the completion of all sanctions imposed if any.

3. Sanctions outlined in subsections (g) through (i) above may not be imposed by a Conduct Officer, even if the student admits violating institutional rules or such sanctions would be merited by the student's previous conduct record; such sanctions may be recommended to the Student Services Department by the Student Conduct Board. The final determination will be made by the President of the College.

4. Any or all of the sanctions listed above may be imposed for any single violation.

5. Only disciplinary sanctions of expulsion, revocation or withholding of a degree for violation of Student Code of Conduct will be made part of the student's permanent academic record, and all other sanctions shall become part of the student's disciplinary record. Upon graduation, the student's disciplinary record may be expunged of disciplinary actions other than, College suspension, expulsion, revocation or withholding of a degree, upon application to the Conduct Officer; otherwise, these shall be expunged from the student's confidential record three (3) years after final disposition of the case.

6. The following sanctions may be imposed upon groups, organizations and/or members of groups or organizations acting on behalf of the group or organization

a. Loss of selected rights and privileges for a specified period of time

b. Loss of all privileges, including College recognition, for a specified period of time. In each case in which a Student Conduct Board determines that a student and/or group or organization has violated the Student Code of Conduct, the sanction(s) shall be determined and imposed by the Student Conduct Board as prescribed by the Student Code of Conduct. Following the hearing conducted by the Student Conduct Board or Conduct Officer, the Conduct Officer shall advise the student member(s) of the group and/or organization and the complainant in writing of its determination and of the outcome of the hearing and sanctions, if any are imposed.

## Interim Suspension

In certain circumstances, a campus interim suspension may be imposed prior to the Student Conduct Board Hearing. The Conduct Officer may impose interim suspension.

1. To ensure the safety and well-being of members of the College community or preservation of College property; 2) to ensure the student's own physical or emotional safety and well-being; or 3) if the student poses an ongoing threat of disruption of, or interference with, the normal operations of the College.

2. The student shall be notified in writing of this action at the time it is imposed. Notification will include the reasons for the interim suspension. The notice will include the place, date, and time (within 24 hours of the notification) of an appeal hearing at which the student may show why his/her continued presence on the campus does not constitute a threat.

3. During the interim suspension, a student will be denied access to the campus (including classes) and/or all other College activities

or privileges for which the student might otherwise be eligible, as the Conduct Officer may determine to be appropriate. Any negative impact (including academic or financial) of interim suspension is borne by the student.

4. The interim suspension does not replace the regular process, which will proceed on the normal schedule, up to and through a Student Conduct Hearing, and if the suspension is applied as a sanction, through the appeal process.

## Appeals

Only decisions resulting in suspension, expulsion, or revocation of admission and/or degrees may be appealed.

1. A decision reached by the Student Conduct Board or a sanction imposed by the Conduct Officer may be appealed in writing by the accused student(s) to the Student Services Department within three (3) class days of the decision.

2. An appeal may only be made if it is discovered that there was information in possession of the College that was not included in the previous hearing; the sanction(s) was beyond the scope of the Student Conduct Code, or notification and/or hearing procedures were not followed.

3. Except as required to explain new information, an appeal will be limited to a review of the verbatim record of the Student Conduct Board Hearing and supporting documents.

4. If an appeal is upheld by the lead authority within the Student Services Department, s/he will reach a final determination. If a new sanction is imposed, the finding of the lead authority within the Student Services Department is final and may not be appealed.

5. In cases where a sanction of suspension, expulsion, or removal from the College is imposed according to the procedures outlined in this Code, the sanction will take effect according to the timeline established by the Conduct Officer or Student Conduct Board regardless of whether or not an appeal is pending. The College will not be responsible for any hardships that an accused student may entail in the completion of duly imposed sanctions which are later reduced or overturned upon appeal.

## Interpretation and Revision

1. Interpretation – Any question of interpretation of the Student Code will be referred to the Conduct Officer.

2. Revision – The Student Conduct Board for compliance with Wisconsin will review the Student Code annually and Federal Laws pertaining to areas covered by Student Codes of Conduct and for effectiveness.

## Student Computing Resource Guide

Your network account gives you access to Blackhawk computer network services, such as the MyBTC portal, the internet, Microsoft Office products and your personal data storage space (i.e. OneDrive).

When a College computer is turned on, a "Welcome to Windows" message displays. Press CTRL + ATL + Delete to begin. You will be prompted for your username and password.

Your username is the first initial of your first name and your last name (no spaces between). Some users will have numbers added to ensure uniqueness. Your username can be found on your acceptance letter or on your registration schedule/bill when you register for classes.

Your password is initially set to Blackhawk and your 9 digit student ID number (found on your acceptance letter or on your registration schedule/bill) and must be changed the first time you log in. Example initial password: Blackhawk000123456

More information about Information Technology can be found at <https://blackhawk.edu/Student-Resources/Information-Technology-Services/> (<https://blackhawk.edu/Student-Resources/Information-Technology-Services/>) or contact the ITS Help Desk at (608) 757-7711.

## Think Before You Print

As a registered student, you will automatically receive the following FREE printing budget at the beginning of each semester: Fall & Spring \$15; Summer \$5.

Printing prices are as follows:

- 3¢ – double-sided black ink
- 18¢ – double-sided color
- 2¢ – more each for single-sided

Students may increase their budget by purchasing with PayPal or in-person at the Registration and Records Office. Funds added to the printing budget do not roll over to the next semester.

## MyBTC Portal

The MyBTC portal is your connection to College resources. You can access the portal at [blackhawk.edu](https://blackhawk.edu) with your network username and password. In the portal, you can access information and your student records, including:

- Email
- Blackboard
- Register for classes
- Financial Aid
- Grades
- Starfish

You will be prompted to enter your password again the first time you access systems within the portal and after a password change.

Remember, always sign out, close the browser, and log off the computer when you finish.

## BTC Email Accounts

Every registered student is assigned an email account with his or her network account. Your email address will be [username@students.blackhawk.edu](mailto:username@students.blackhawk.edu).

The BTC student email account is BTC's official communication method. It is where students receive emails specific to important College-wide and campus-specific announcements and communication with BTC staff. Instructors may email students regarding assignments, class cancellations and course updates. Check it often to stay informed.

In order to ensure that emails are received, do not forward student email account to an alternate account as security measures may block receipt of emails.

Student email accounts can be accessed via the MyBTC portal and clicking on Webmail, or directly at <https://outlook.office365.com/>, using your full email address and password.

Students are encouraged to check out their BTC email daily. This is the official email address used for college business.

## Blackboard

Blackboard is a learning management system. Courses offered in online and hybrid formats will utilize this tool to distribute and collect materials as well as to conduct discussions and assessments. Classes offered face to face may utilize this system to support in-class instruction. Your instructor's syllabus will indicate whether the class will be using Blackboard.

Blackboard can be accessed via the MyBTC portal, or go directly to the Blackboard website at [blackhawk.blackboard.com](https://blackhawk.blackboard.com) (<http://catalog.blackhawk.edu/policies/student-computing/blackhawk.blackboard.com>), using your network username and password. Students taking online or hybrid courses have access to the Online Student Orientation in Blackboard. This is a valuable resource for learning about Blackboard functions and online/hybrid procedures. It is listed in "MyCourses" in Blackboard.

## Passwords

You will be prompted to change your password every 180 days. Passwords must be complex, meaning that they come upper case, lower case, symbols, and numbers, or at least three of those four groups, and must be eight or more characters in length. Passwords are case sensitive. To change your network/MyBTC password:

1. Log in to the network
2. Press CTRL + ALT + Delete
3. Select change password
4. Enter your current password
5. Enter your new password twice
6. Click "OK"

All users must register their security questions promptly after the first login. Go to the MyBTC Portal on [blackhawk.edu](https://blackhawk.edu) and select Forgot my password at the login screen. You need to know your current username and password to register your answers. If you forgot your password you will be able to reset it by correctly answering your saved questions.

Forgotten passwords may be reset at the Password Reset link. You must have security questions registered in order to use the password reset tool. If you do not register your security questions you will be required to come into the IT department in room 2506 at Central Campus with a photo ID in order to have your password reset.

Do not share your password. BTC personnel will never ask for your password.

## Need help?

For login help in the BTC Systems, call the help desk at (608) 757-7711.



## Student Identification Numbers and FERPA

As of January 1, 2000, Wisconsin Act 128 limits the disclosure and release of student Social Security numbers. In order to comply with Act 128, Blackhawk assigns a unique identification number to each student. This identification number does not incorporate the student's Social Security number. Blackhawk may collect and report Student Social Security numbers for state and federal reporting requirements. Blackhawk procedures are designed to ensure that student Social Security numbers remain confidential.

### FERPA

The Family Education Rights and Privacy Act (FERPA (<http://www.ed.gov/policy/gen/guid/fpco/ferpa/>)) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student's education records
2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Blackhawk Technical College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office  
U.S. Dept. of Education  
600 Independence Avenue, SW  
Washington, DC 20202-4605

## Privacy and Access to Student Records

Blackhawk Technical College policy on privacy of records and releasing of information follows the directives outlined in the Family Educational Rights and Privacy Act (FERPA), the federal law governing the protection of educational records. Registered students will be notified of this policy on an annual basis.

Personally identifiable information will not be released from an education record without the prior, written consent of the student unless an exception has been granted by FERPA (see exception section below).

## Rights under FERPA

FERPA affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student's education records within 45 days of the day the College receives a request for access. You should submit to the Registrar written requests that identify the record(s) you wish to inspect. The Registrar will arrange for access and notify you of the time and place where the records may be inspected. At the time of viewing, the student will present some form of picture identification, such as a valid driver's license, before being allowed to view the record.
2. The right to request the amendment of the student's education records that the student believes is inaccurate or misleading.

You should write to the Registrar, clearly identifying the part of the record you want changed, and specify why it is inaccurate or misleading. If Blackhawk decides not to amend the record as requested, the college will notify you of the decision and advise you of your right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to you when you are notified of the right to a hearing.

3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent (see section on exceptions below).
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures of the College to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office  
U.S. Department of Education  
600 Independence Avenue, SW  
Washington, D.C. 20202-4605

## Exceptions under FERPA

Under certain conditions, as authorized by FERPA, information can be released without student consent. They are:

### Directory Information

The use of the term Directory Information does not imply that the College actually has a document containing Student Directory Information, or that the College has any obligation to produce such a document.

The Blackhawk Technical College Board has designated the following information as directory information and therefore can be released without your written consent:

The College has defined Directory Information as the following:

- Student Name
- Student Address and Phone Number
- Date and Place of Birth
- Full-time or Part-time Status
- Major Field of Study
- Dates of Attendance
- Credits Earned Toward a Diploma
- Degrees and Awards Received
- Photos and Videos of Students for use in College Press Releases, Publications, and WEB Sites
- Blackhawk Assigned Student Email Accounts

Students have the right to restrict the disclosure of "Directory Information" at any time. To restrict the disclosure of Directory Information, a student may file a Privacy Request Form to the Registration and Records Office on Central or Monroe Campuses. The request to restrict disclosure of Directory Information will be honored until the student notifies the Registration and Records Office in writing to the contrary.

Blackhawk, under most circumstances, will not release information in your file without your written consent provided on the Release of Student Records form found at <https://blackhawk.edu/Student-Resources/>



Registration-Records (<https://blackhawk.edu/Student-Resources/Registration-Records/>). Please see Registration and Records at Central Campus or Registration at Monroe Campus for questions on this policy and/or form.

## U.S. Military

According to federal law, the College must release to the U.S. Armed Forces student name, address, phone number, date of birth, and field of study.

## Authorized Federal, State, and Local Authorities

Student authorization is not required for disclosure to an authorized representative of the following individuals or entities:

- The Comptroller General of the United States
- The Secretary of the U.S. Department of Education
- State educational authorities
- Any party legitimately connected with a student's application for, or receipt of, financial aid
- Accrediting organizations
- Agencies involving an audit or evaluation of compliance with education programs
- Organizations conducting studies for or on behalf of educational institutions

## Other Institutions

Information can be released to other schools to which a student seeks or intends to enroll.

## Emergency Situations

Information can be released to law enforcement personnel, emergency personnel, and College officials in an emergency in order to protect the health or safety of students or other persons.

## Legitimate Educational Interest

Officials of the College who are determined by the College to have a legitimate educational interest may have access to student records without obtaining consent from the student. Officials of the College are defined as:

- Persons employed by the school in an administrative, supervisory, academic, research, or support staff position,
- Persons serving on school governing bodies, and
- Persons employed by or under contract to the College to perform a specific task, such as an attorney or auditor.

*An official has a legitimate educational interest if they need to:*

- Perform duties specified in their job description or under terms of contractual agreement,
- Provide campus services related to a student, such as advising, financial aid, and counseling, or
- Conduct tasks related to a student's education or campus discipline.

## Judicial Order

Information must be released to comply with a judicial order or lawfully issued subpoena. However, the College will make a reasonable effort to notify the student of the order or subpoena in advance of compliance,

so that the student may seek protective action. However, if the court (or other issuing agency) has ordered that the existence or the contents of the subpoena or judicial order not be disclosed, the College will comply and notification to the student will be withheld.

## Grievance Hearing

Information about a student or students involved in a grievance investigation or grievance hearing may be released to members of the grievance committee, including any students assigned to that committee, if such information is germane to the investigation or hearing.

## Disciplinary Hearing

The results of a disciplinary hearing may be released to an alleged victim of a crime of violence without the permission of the accused.

## Blackhawk Technical College Foundation

Student names and addresses may be released to the Blackhawk Technical College Foundation for foundation-related activities. The Foundation is considered part of the College and will hold such information confidential, using the information only in specific activities intended to aid and support the College. The release of such information to the Foundation will be made only with the approval of the College President or his/her designee.

## U.S. Patriot Act

The College must release, without consent or knowledge of the student, personally identifiable information from a student's education record to the Attorney General of the United States or his/her designee in connection with the investigation or prosecution of terrorism crimes specified in sections 233b (g)(5)(B) and 2331 of Title 18, U.S. Code.

## Written Release

Personnel employed by the College who have consent in the form of a written release of information, signed by the student, may disclose student information to appropriate outside agencies or persons.

**Note:** A record of disclosure will be maintained within a student's file indicating when information has been released from that file and to whom.

**Note:** A fee of five dollars may be assessed for the copying of all or a portion of a student record.

## Transfer of Credit from Blackhawk

Blackhawk provides knowledge and skills related to occupational preparation. Additionally, credits earned in various Blackhawk programs may be transferable to a number of colleges and universities offering baccalaureate degrees.

Blackhawk has written transfer agreements with a number of private and public four-year colleges and universities. Academic advisors have information regarding institutions that accept Blackhawk credits. In all cases, the granting of such credits is at the discretion of the accepting college or university. Therefore, it is essential that students consult with their advisor regarding credit transfer.

Visit <https://blackhawk.edu/Programs-Classes/Transfer-After-BTC> (<https://blackhawk.edu/Programs-Classes/Transfer-After-BTC/>) for more information about transferring credit from Blackhawk.

## **UW/WTCS Policy on Credit Transfer**

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Any student enrolled in the Wisconsin Technical College System who wishes to continue their education in the University of Wisconsin System may be eligible to transfer credits toward a bachelor's degree.

UW institutions may accept in transfer up to forty-eight (48) BTC core credits. In cases where UW institutions find such course work not acceptable for transfer, BTC students should have an opportunity to earn credit by examination if the UW institution offers a course which is generally comparable in content and/or title.

UW System students who have successfully completed an Associate of Applied Arts/Science Degree may be eligible to transfer certain technical support and/or occupational credits when there is a direct relationship between BTC's Associate Degree program and a program offered at a UW System institution.

Students transferring from the WTCS may earn credits by earning appropriate scores on national standardized examinations (e.g., College Level Examination Program) or examinations developed by the UW System transfer institution.

For more information about transfer opportunities, you should consult with your advisor or contact the admissions office at the UW System institution or private college of your choice.

# STUDENT CODE OF CONDUCT

Blackhawk Technical College is dedicated to providing technical and adult education to the residents of Rock and Green Counties. In support of its mission, the College seeks to provide the opportunities and protections, which best serve the educational process. Students are entitled to the basic rights and protections as an individual enjoyed by all members of society. At the same time, they are also subject to obligations as a member of the College community. Blackhawk has adopted a Student Code of Conduct that sets forth the standards of conduct expected of students who choose to enroll at Blackhawk. It is intended to protect the welfare and safety of everyone and also assure that a valid learning environment exists. The Blackhawk Student Code of Conduct is intended for the benefit and protection of everyone involved in education and other activities at the College.

Students are expected to know and willingly follow the code in their everyday activities including Blackhawk-sponsored activities held off-campus. Conduct that violates the code is not acceptable and will not be tolerated. The student conduct regulations are intended to give students general notice of prohibited conduct. However, they are not meant to define misconduct in every circumstance.

The Conduct Officer shall determine the composition of the Student Conduct Board and will hear administrative hearings. The Conduct Officer will initiate all hearings. The Student Conduct Board is responsible for reviewing proposed changes to the Student Conduct Code; for assuring that such changes are consistent with the provisions of the code; and for assessment of the effectiveness of the Student Conduct Code. Only decisions resulting in suspensions, expulsion or revocation of admission and/or Degrees may be appealed. Decisions made by a Student Conduct Board and/or Conduct Officer shall be final (there is no appeal), when sanctions (a) through (f) of Article XVI, Section 2 are imposed. When sanctions (a) through (f) are imposed, the student will have the opportunity to either have an Administrative Hearing (meeting with the Conduct Officer) or present the case to the Conduct Board. When sanctions (g) through (l) are imposed, the case will be automatically taken to the Conduct Board for consideration. A student may file an appeal by the process herein described. The sanction(s) imposed is in effect until the appeal process is concluded.

This Code of Conduct, arranged alphabetically by category, establishes standards of behavior for students and student organizations at the College. Students are required to be knowledgeable of all policies of the College. These are contained in the College Catalog, and College website.

Note: A violation of the Code of Conduct may also constitute a violation of city, state, or federal law and vice versa. If so, simultaneous prosecutions may result. Students should be aware that student status does not insulate them from awareness of and compliance with other laws.

## Complicity

A student shall not, through act or omission, assist another student, individual, or group in committing or attempting to commit a violation of this Code of Conduct. A student who has knowledge of another committing or attempting to commit a violation of the Code of Conduct is required to remove him or herself from the situation, and failure to do so may be the basis for a violation of the Code of Conduct.

Students are responsible for the behavior of their guests and must ensure that guests comply with College regulations including the standards in this Code of Conduct.

## Academic Honesty

All students must be honest and forthright in their academic studies. To falsify the results of one's research, to steal the words or ideas of another, to cheat on an assignment, or to allow or assist another to commit these acts corrupts the educational process. Students are expected to do their own work and neither give nor receive unauthorized assistance.

Any violation of this standard must be reported to the Conduct Officer and the Department Dean. The faculty member, in consultation with the Department Dean and/or the Conduct Officer, will decide whether the matter should be processed through the Student Conduct System or resolved without a formal hearing. In the latter case, the faculty member must have the agreement of all students directly affected.

## Plagiarism

Plagiarism is the inclusion of someone else's words, ideas, images, or data as one's own. When a student submits academic work that includes another's words, ideas, images, or data, whether published or unpublished, the source of that information must be acknowledged with complete and accurate references and if verbatim statements are included, with quotation marks as well. By submitting work as his or her own, a student certifies the originality of all material not otherwise acknowledged. Plagiarism includes, but is not limited to:

- The quotation or other use of another person's words, ideas, opinions, thoughts or theories (even if paraphrased into one's own words) without acknowledgment of the source;
- The quotation or other use of facts, statistics, or other data or materials (including images) that are not clearly common knowledge without acknowledgment of the source.

## Copyright Infringement

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the U.S. Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement. Unauthorized distribution of copyrighted material, including unauthorized peer-to-peer file sharing, may subject the student to civil and criminal liabilities. For more information, see the website of the U.S. Copyright Office at [www.copyright.gov](http://www.copyright.gov).

## Fabrication

Fabrication is the use of invented information or the falsification of research or other findings. Fabrication includes, but is not limited to:

- The false citation or acknowledgment of a direct or secondary source, including the incorrect documentation of a source;
- The citation, in a bibliography or other list of references, of sources that were not used to prepare the academic work;
- The inclusion in an academic work of falsified, invented, or fictitious data or information, or the deliberate and knowing concealment or distortion of the true nature, origin, or function of such data or information; or

- The unauthorized submission of academic work prepared totally or in part by another.

## Cheating

Cheating is an act or an attempted act of deception by which a student seeks to misrepresent that he or she has mastered information that has not been mastered. Cheating includes, but is not limited to:

- Copying of all or any portion of another's academic work and submitting it, in part or in its entirety, as one's own;
- Allowing another person to copy one's own academic work, whether intentionally or recklessly;
- The unauthorized use or possession of a class textbook, notes, or any other material to complete or prepare an academic work;
- The unauthorized collaboration with any other person on an academic exercise, including collaboration on a take-home or make-up academic exercise;
- The unauthorized use of electronic instruments such as cell phones, PDAs, or personal response systems (clickers) to access or share information;
- The unauthorized completion for another person of academic work, or permitting someone else to complete academic work for oneself, including through the use of personal response systems (clickers).

## Academic Misconduct

Academic misconduct is any other act that disrupts the educational process or provides a student with an academic advantage over another student. Academic misconduct includes, but is not limited to:

- The unauthorized possession, copying, distribution, sale, or other transfer of all or any part of an academic exercise, or the answers or solutions to an academic exercise, whether or not the exercise has been administered;
- Changing, altering, attempting to change or alter, or assisting another in changing or altering any grade or other academic records, including grades or records contained in a grade book or computer file, that is received for or in any way attributed to academic work;
- Entering any College building, facility, office, or other property, or accessing any computer file or other College record or storage for the purpose of obtaining the answers or solutions to an academic exercise or to change the grade;
- Continuing to work on an academic exercise after the specified allotted time has elapsed;
- Bribing another person to obtain an academic exercise, including answers to questions of an academic exercise that is not administered.

## Alcohol Regulations

The possession, consumption, transfer, and sale of alcoholic beverages on Blackhawk premises is strictly prohibited. In addition, possession, use, and sale of alcohol are further regulated in accordance with applicable state and federal laws and Wisconsin Administrative codes. Blackhawk cooperates with local police agencies to enforce underage drinking laws and other violations related to the possession, use, and sale of alcohol. As a Blackhawk student, you are expected to comply with all laws and District policies regarding the use of alcoholic beverages. Depending on the nature of the violation, you may face legal prosecution and/

or disciplinary action in accordance with applicable laws and College procedures.

All students must comply with applicable laws and these alcohol regulations:

## Medical Reprieve

Student health and safety are of primary concern at BTC. As such, in cases of intoxication and/or alcohol poisoning, the College encourages individuals to seek medical assistance for themselves or others. If an individual seeks medical attention due to his/her level of intoxication, the Conduct Officer may not pursue conduct sanctions against the student for alcohol violations. In lieu of student conduct sanctions, the intoxicated student will be required to meet with the Conduct Officer who may issue educational requirements such as an alcohol education class and/or an alcohol and substance abuse assessment.

Please note: Medical Reprieve will not be granted to students who do not seek medical assistance. Students who are confronted by College staff will be referred to the Conduct Officer for alleged policy violations.

## Prohibited Activities

The College prohibits alcohol intoxication by students (regardless of age); the unauthorized possession, use, consumption, manufacture, sale, or distribution of alcohol; and driving while impaired due to alcohol consumption. Specifically, this offense includes, but is not limited to:

- The possession, use, consumption, manufacture, sale or distribution of alcohol by anyone under the legal age to do so;
- The possession, use, consumption, manufacture, sale or distribution of alcohol in violation of any applicable law, including the laws of the State of Wisconsin;
- The possession, use, consumption, manufacture, sale or distribution of alcohol in any College building, facility, or property;
- The possession of any apparatus used to facilitate the rapid consumption of alcohol or drinking games;
- A violation of any College policy or procedure concerning the use of alcohol or enacted to monitor or control the use of alcohol.

Students who display intoxicated behaviors or students who require staff assistance due to the consumption of alcohol or illegal drugs while attending classes or college functions are subject to disciplinary action.

Evidence of an intoxicated person may include, but is not limited to, a combination of the following indicators:

- Odor of intoxicants on the breath
- Bloodshot eyes
- Dilated pupils
- Stumbling or staggering
- Slurred speech
- Impairment of dexterity

Other restrictions can be imposed by college administration as deemed necessary.

## Student Organizations

No student organization that hosts, organizes, conducts, or participates in an on-campus function or event sponsored or sanctioned by the

College shall serve alcohol or permit the possession, use, consumption, manufacture, sale or distribution of alcohol.

### Use of Alcohol On-Campus

As described above, the possession, use, consumption, manufacture, sale, or distribution of alcoholic beverages is prohibited.

### Use of Alcohol Off-Campus

The College accepts no responsibility for the possession, use, consumption, manufacture, sale, or distribution of alcoholic beverages by students off campus including at events or functions sponsored in whole or in part by one or more student organizations or individuals. A student hosting or attending an off-campus function should be aware of the applicable laws regarding alcohol and should be aware that the College may impose sanctions upon the student for such behavior. The student organization advisors, faculty, staff or other college administration as deemed necessary can impose other restrictions.

### Educational Exception

The possession, distribution, and consumption of alcoholic beverage and intoxication of individuals is allowable, under supervision, direction, and control by the Wisconsin Law Enforcement Recruit Academy program, for the education of law enforcement recruits.

## Disruptive Conduct

A student shall not impair, interfere with, or obstruct the orderly conduct, process, or function of the College or any of its students, faculty members, College officials, or guests.

### Prohibited Activities

Specific violations of this standard include, but are not limited to:

- Committing or threatening to commit any act of violence against self or others;
- Threatening the health, safety, or welfare of another or engaging in conduct that endangers the health, safety, or welfare of the student or anyone else;
- Interfering with the freedom of movement of another person;
- Invading the privacy of another person;
- Stalking (purposely and repeatedly engaging in behavior and/or communication directed at a specific person which causes that person alarm, distress, fear or a change of normal behavior)
- Interfering with the right of another to enter, use, or leave any College building, facility, property, services, resources, or activity;
- Interfering with the freedoms of speech, religion, or association of another;
- Trespassing or the unauthorized entering or accessing of any College building, facility, property, employee office or work area, services, resource, or activity;
- Instigating or otherwise encouraging others to engage in a fight, riot or other disruption;
- Making, exhibiting, or producing any inappropriate, loud, or disruptive noise or behavior;
- Exhibiting public nudity or lewd behavior.

## Endangering the Safety of Others

A student shall not endanger the lives or safety of others.

### Prohibited Activities

Specific violations of this standard include, but are not limited to:

- Creating an unsafe condition or environment which could cause harm to others;
- Setting or causing a fire;
- Tampering with, misusing or damaging fire or safety equipment such as alarms, heat sensors, smoke detectors, hoses, and fire extinguishers;
- Failing to immediately exit any facility or building when a fire alarm has been sounded or hindering or impairing the orderly evacuation of any College facility or building;
- Disobeying a command by any College official or faculty member in connection with a fire, alarm, or other safety or security matter.

## Failure to Comply

It is a violation to ignore, disobey, disregard, or otherwise violate any provision of this Code of Conduct or any applicable rule.

### Prohibited Activities

Specific violations of this standard include, but are not limited to:

- Failing to comply with the directive of any College official, security or faculty member including any sanction imposed by the Conduct Officer upon a group or individual;
- Failing to comply with the terms of any procedure or agreement;
- Failing to comply with any applicable federal, state, or local law.

## False Information

A student shall not provide false or misleading information.

### Prohibited Activities

Specific violations of this standard include, but are not limited to:

- Making a false or misleading oral or written statement to any College official, security or faculty member when the student knew or should have known the statement was false
- Making a false or misleading oral or written statement that misrepresents the character, qualifications, or reputation of another;
- Falsely reporting the presence of an explosive or incendiary device, or fire, or other safety hazards;
- Falsely reporting a crime or violation of this Code of Conduct;
- Possessing or displaying any form of false identification or any identification not one's own.

## Illegal Drug Policies

The College prohibits the possession, use, consumption, manufacture, sale, or distribution of drugs and drug paraphernalia. Any violations may be subject to sanctions by the Student Conduct System and may be reported to all appropriate law enforcement authorities.



## Definitions

The term "drugs" broadly includes, without limitation, any stimulant, intoxicant (other than alcohol), nervous system depressant, hallucinogen, or other chemical substance, compound, or combination when used to induce an altered state, including any otherwise lawfully available product used for any purpose other than its intended use. The term "drug paraphernalia" broadly includes any material, product, instrument, or item used to create, manufacture, distribute, use or otherwise manipulate any drug and includes, but is not limited to, hypodermic needles and syringes.

## Prohibited Activities

Specific violations of this standard include, but are not limited to:

- The possession, use, consumption, manufacture, sale, or distribution of any drug or drug paraphernalia, prescription or prescription drug not prescribed to the student;
- The delivery, transfer, or intent to deliver, transfer, or manufacture any drug or drug paraphernalia;
- A violation of any applicable local, state or federal law relating to drugs or drug paraphernalia; The sale, delivery, or transfer of a prescription or prescription drug
- The possession of a prescription or prescription drug not issued to the student is a violation of any applicable local, state or federal law relating to drugs or drug paraphernalia;
- The sale, delivery, or transfer of a prescription or prescription drug
- The possession of a prescription or prescription drug not issued to the student

## Misuse of College Assets

A student shall not misuse any College material, service or property.

## Prohibited Activities

Specific violations of this standard include, but are not limited to:

- Destroying, damaging, misusing, or defacing any College building, facility, or property, or any private property on-campus or being used for a College-sponsored event;
- Destroying, damaging, misusing, reproducing, or defacing any student identification card, College provided key or other access cards, laboratory equipment or any material issued or owned by the College;
- Impairing or otherwise hindering another's use of a College material, service or property
- Reading, duplicating, removing, photographing, forging, counterfeiting, or altering any College document or record without authorization;
- Littering on or in any College property, facility, or building;
- Engaging in conduct that may result in damage or destruction of any College building, facility or property, including without limitation, skateboarding or rollerblading on steps, railings, banisters or curbing.

## Off-Campus Conduct

### Temporary Suspension When Certain Criminal Charges are Pending

The College may temporarily suspend any student when certain charges are pending against that student, subject to the procedures set forth in

this guide. Specifically, a temporary suspension may be mandated where the crime involves an act of violence, the sale, manufacture or delivery of drugs or any other conduct that is egregiously offensive to the College's mission.

## Emergency Suspension

The College may remove any student where the continued presence of the student on campus poses a threat to the safety or rights, welfare, or property of another, subject to the procedures set forth in this Guide.

## Sexual Misconduct

Blackhawk Technical College is bound by and supports all applicable laws related to sexual misconduct. The Campus Sexual Violence Elimination Act (SAVE) of 2013 and the Violence Against Women Reauthorization Act (VAWA) ensures that colleges and universities implement policies and programs to prevent sexual assault, dating violence, domestic violence, and stalking.

Blackhawk strives to provide a safe and welcoming campus environment. In order to attain this goal, the College seeks to provide safety, privacy, and confidentiality where possible, to support victims of sexual assault and violence at all College Campuses and Centers. The College offers educational programming to promote the awareness and prevention of rape, acquaintance rape, sexual assault, sexual harassment, domestic violence, dating violence, and stalking.

Blackhawk prohibits all forms of sexual misconduct and violence including, but not limited to, rape, acquaintance rape, sexual assault, sexual harassment, dating violence, domestic violence, stalking, and hate crimes between or against members of its college community. This policy will apply regardless of whether a criminal proceeding has been initiated, the conduct occurred on campus, or involved a College-sponsored activity. The College will respond appropriately to address violations of this policy in a manner that is reasonable to prevent such conduct from recurring and to minimize the effects on victims and the College community. Retaliation for filing a report or complaint or for participating in a related investigation or disciplinary proceeding is also a violation of this policy.

The Title IX Coordinator position oversees all sex discrimination, sexual harassment, and sexual assault and relationship violence complaints at the College, and was created to promote an environment that is free of gender bias and misconduct. The Title IX Coordinator is responsible for conducting an annual report and review of complaints to ensure compliance with Title IX, make improvements, and identify any patterns or systemic problems within the College community. The Title IX Coordinator serves as a neutral administrator and resource to employees and students to answer questions, to coordinate reporting and handling of complaints, to review internal disciplinary proceedings and remedies, to provide education, training, and guidance to public safety, student development, human resources, and other personnel involved with investigations and disciplinary proceedings.

Title IX Coordinator:

Lynn Neitzel, Director of Teaching Support Services  
Central Campus, Student Success Center  
(608) 743-4508  
lneitzel@blackhawk.edu

The College has designated a Deputy Title IX Coordinator to assist the Title IX Coordinator. A Title IX Deputy Coordinator is responsible for assisting the Title IX Coordinator to conduct training, climate assessments, and facilitate communications on behalf of the College with the student or employee who reports a violation, the respondent, and with any administrators responsible for administering this policy.

#### Deputy Title IX Coordinator

Alicia Acker, Career Services and Leadership Development Coordinator  
Central Campus, Student Services  
(608) 743-4423  
aacker@blackhawk.edu

Please see the Gender Discrimination & Sexual Misconduct Addendum for information on procedures and detailed definitions related to sexual misconduct.

Alleged sexual misconduct violations will be investigated through the process and procedures outlined in the Gender Discrimination & Sexual Misconduct Addendum. Any violations of sexual misconduct are sanctioned by the Title IX Coordinator and through the Student Code of Conduct Procedures.

## Student Complaint Procedure Notice

Any student who believes he/she or another student has been the victim of any form of sexual misconduct is encouraged to file a complaint identifying the alleged individual and describing the conduct, incident(s) or occurrence(s) that form the basis for the complaint. Students may file complaints with any College employee, who will then notify the Title IX Coordinator/Deputy Title IX Coordinator for students. If the Title IX Coordinator or Deputy Title IX Coordinator for Students is alleged to be the person who engaged in discrimination or sexual misconduct, the Deputy Title IX Coordinator for Employees will investigate the incident.

Any College staff member can help with filling out the incident report. It is preferred that the complaint be submitted via an electronic incident report. Incident reports can be found at <https://blackhawk.edu/About/Safety-Security/Title-IX>.

If, due to a disability, accommodations are needed to assist the student in filing a complaint, please contact Access and Accommodation Services at (608) 757-7796. The complainant is encouraged to file the complaint as soon as possible after the incident to ensure a prompt and effective due process for all the parties involved in the situation.

If the complainant requests confidentiality or requests that the complaint not be pursued, the Deputy Title IX Coordinator for Students (or other trained investigators) will take all reasonable steps to investigate the complaint and respond consistently with the complainant's request. If the College determines that an investigation needs to continue, the alleged respondent will be told that the complainant requested the College to not proceed. Information will only be shared with individuals responsible for addressing incidents of sexual violence. Prior to disclosing information, the complainant will be notified of the information to be disclosed, whom it will be disclosed to, and why the information needs to be disclosed. Honoring a request for confidentiality may limit the College's ability to respond to the allegation, including pursuing sanctions and remedies against the respondent(s). In addition, the College will need to determine if the confidentiality request can be honored while providing a safe and nondiscriminatory environment.

The College will take steps to maintain the confidentiality of persons reporting incidents of sexual misconduct and relationship violence in records available for public inspection by using alternative means of identification and not including personally identifiable information in the annual campus security report, campus crime log, and emergency warning notices required under the Clery Act. Requests for confidentiality will be evaluated in the context of the College's responsibility to provide a safe and nondiscriminatory environment for all students.

A complainant has the option to file a criminal report with a local law enforcement agency. The College Title IX Investigator/Security Department will offer to provide assistance if the individual elects to contact the police. Declining to speak with an investigator or the police at the time of the initial report does not prevent the individual from filing a criminal report or a Title IX complaint later. The College Safety and Security Office may seek the assistance of local law enforcement agencies in the investigation.

The College will not condone false reporting. Any person who makes a report that is later found to have been intentionally given falsely or made maliciously without respect for the truth may be subject to suspension or expulsion.

### Initial Remedies

Prior to initiating an investigation, the Title IX Coordinator/Deputy Title IX Coordinator will meet with the complainant to explain the investigation process and the eventual resolution process to the student. The College Title IX Coordinator/Deputy Title IX Coordinator will encourage him/her to participate fully in the investigation and hearing processes as well as provide a list of resources. Students will also be notified of their rights and the process to file a complaint with local law enforcement.

If necessary, initial remedial actions will be discussed such as:

- No contact agreement between complainant and respondent
- Change in academic and office assignment situations if requested by complainant or respondent and reasonably available, for the complainant and respondent
- Absence and assignment requirements
- Request for leave of absence or withdrawal
- Plan to address safety concerns

### Preliminary Investigation

Throughout the investigation, appropriate support for the complainant and respondent will be provided. Complainants and respondents will be informed of campus and community resources, including counseling and other health services. These options will be made available to the individual regardless of whether he or she proceeds with a formal complaint under BTC College policy or files a criminal report or complaint with the police. In compliance with guidelines distributed by the Office of Civil Rights (OCR), in their 2011 Dear Colleague Letter, BTC uses a "preponderance of the evidence" (more likely than not) standard for determining responsibility. This is different from the standard used in a criminal investigation.

A preliminary investigation will be conducted to determine if there is reasonable cause to believe a policy was violated. If no reasonable grounds for the complaint are found, the Title IX Coordinator will dismiss the case. The complainant will be informed of why the act does not constitute sexual misconduct and voluntary, informal methods may be used to resolve the complaint. If it is determined by the College Title IX

Coordinator that there may be some validity to the allegation, a formal investigation will begin immediately.

### **Sanction Statement**

The College reserves the right to take whatever measures it deems necessary in response to an allegation of sexual misconduct to protect students' rights and personal safety. Such measures include, but are not limited to, class schedule modifications, interim suspension from campus pending a hearing, and reporting the matter to the local police. Not all forms of sexual misconduct will be deemed equally serious offenses and the College reserves the right to impose different sanctions, ranging from a verbal warning to expulsion, depending on the severity of the offense. Previous conduct code violations will be considered in determining the appropriate sanction. The College will consider the concerns and rights of both the complainant and the respondent of sexual misconduct.

The Title IX Coordinator has the right to broaden or lessen any range of recommended sanctions in the case of serious mitigating circumstances or egregiously offensive behavior. The initial investigative team, appeals body, or designee may not deviate from the range of recommended sanctions unless there is a compelling justification to support a deviation.

### **Formal Investigation Process**

The following process will be used to further investigate allegations:

Upon receiving a complaint, the Deputy Title IX Coordinator for Students will facilitate a fact-finding investigation which will include assigning a trained Title IX investigator to review the complaint. The Deputy Title IX Coordinator for Students and/or Staff and/or a trained Title IX investigator will conduct interviews with the complainant, respondent, and other appropriate individuals. The investigation will be prompt, thorough and impartial.

The intent of the interview with the complainant, respondent and potential witnesses is to determine a true and complete account of the complaint. The following information will be sought during the interview process:

- The severity of the conduct
- The number and frequency of acts of alleged harassment
- The apparent intent of the person alleged to have engaged in sexual misconduct
- The relationship of the parties
- The response of the complainant at the time of the incident(s)
- The relevant educational/work environment

Periodic updates to the complainant and the respondent will be provided during the entire process.

All persons involved in a sexual misconduct investigation will be reminded that the incident is not to be discussed and that retaliatory action against the complainant, respondent or witnesses will not be tolerated.

The Deputy Title IX Coordinator will submit a report to the College Title IX Coordinator detailing the allegations, evidence collected, and statements from the complainant, respondent and any relevant witnesses to the

conduct. The report will include the Deputy Title IX Coordinator findings as well as any recommendations for sanctions if warranted.

A written record of the investigation will be made, including all notes made of interviews, conversations, or verbal responses to questions posed by the Title IX Investigator(s) to the complainant, witnesses or respondent, and any other aspects of the investigation.

The College Title IX Coordinator will review the investigative report, evidence and all known circumstances from the Deputy Title IX Coordinator for Students and make a final determination. The preponderance of the evidence standard (i.e., it is more likely than not that sexual harassment or violence occurred) will be used to investigate allegations of sexual harassment or violence.

Potential sanctions for students who are found responsible for acts of sexual misconduct could be, but are not limited to, the following:

- Disciplinary action, up to and including, the expulsion of a person found responsible for violating these policies
- Referral to law enforcement when there is danger or threat to the community and/or when requested by the victim
- Referral to counseling, mental health, and student services both on campus and in the community

Communication from the Title IX Coordinator regarding the outcome is communicated to the complainant and the respondent.

A student who disagrees with the findings of responsibility or the sanctions levied may choose to request an appeal to the Vice President, Student Services. The request for an appeal must be made in writing to the Title IX Coordinator and the Executive Director of Student Services within ten academic days of the Title IX Coordinator's decision.

### **Appeal Process**

All students have the right to appeal disciplinary decisions. Appeal requests must be made in writing to the Student Services Department within five (5) academic days after verbal or written notification of the decision or sanction. A student may appeal for two reasons which include:

- Procedural error/ failure to uphold the student's rights that may substantially alter the outcome of the decision
- New evidence that was unknown or unknowable at the time of the investigation and decision. An appeal must include the following information:
  - The name, address and telephone number of the part
  - A clear statement explaining the nature and circumstances of the appeal, citing the new evidence and/or the explanation with specifics of the alleged lack of fairness in the prior hearing.

The Student Services Department will render and cause a decision to be sent to the student within three (3) academic days after receipt of the appeal. The appeal decision shall be considered final.

### **Rights**

The preponderance of evidence standard (more likely than not) is used to evaluate complaints.

The complainant and the respondent are entitled to the same opportunities to have others present during a campus disciplinary proceeding. All parties are permitted to have representatives in all stages

of the process. Notice of representation should be made to the Title IX Coordinator. Both the complainant and the respondent will be informed of the outcome of any campus disciplinary proceeding alleging sexual misconduct.

A trained Title IX investigator and/or the Title IX Coordinator or Deputy Coordinator will investigate complaints. BTC will respond promptly, equitably and thoroughly to all incident reports following the written receipt of the complaint, barring any unusual circumstances.

The decision of the Title IX Coordinator may be appealed to the Student Services Department, whose decision is final. If the complaint is against the key decision-maker within the Student Services Department, the decision may be appealed to the President. If the complaint is against the President, the decision may be appealed to the Board of Trustees, whose decision is final. Complaints against one of the Title IX Coordinators will be investigated and decided by a person appointed within the Student Services Department. The appeal must be made, in writing, within ten (10) business days after the decision has been made.

The College recognizes the right of all parties involved in a complaint to a fair and equitable resolution of complaints.

Falsification, distortion or misrepresentation of information during the course of a complaint resolution process may be grounds for disciplinary action.

#### **Disclosures – FERPA Exemptions**

The final results of a disciplinary proceeding will be disclosed to the alleged victim. This includes the charges, the finding, the sanction(s) related to the victim and the rationale for the decision. BTC may not disclose the name of any other student, including the complainant or witness, without the prior written consent of the student. More information on disclosure and re-disclosure limitations can be found in the College Catalog.

The results of a disciplinary proceeding can be disclosed to anyone if the College determines that the student is an alleged perpetrator of a crime of violence or non-forcible sex offense; and with respect to the allegations made against him or her, the student has committed a violation of the institution's rules or policies.

However, the College may not disclose the name of any other student, including a victim or witness, without the prior written consent of the other student. This disclosure is not subject to the re-disclosure limitation and notice requirements otherwise identified in FERPA.

#### **The Act**

The Campus SaVE Act (the "SaVE Act" or "Act") applies to almost all institutions of higher education since it is directed toward those that participate in financial aid programs under Title IV of the Higher Education Act of 1965. It became effective on March 7, 2013 as part of the Violence Against Women Reauthorization Act (VAWA) and amends the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (known as the Clery Act).

The Act requires higher education institutes to report crime statistics and disclose security-related information in several ways:

It adds offenses involving domestic violence, dating violence, and stalking to the crimes that institutions must report and include in their annual security reports (ASR).

It expands the categories of reportable "hate crimes" to include those based on bias against gender identity or national origin.

The policy statements filed as part of the ASR must now include detailed descriptions of the institution's internal procedures in cases of domestic violence, dating violence, or stalking, as well as descriptions of its education and prevention programs.

#### **Key Definitions**

When reporting offenses under the Clery Act, use the following definitions:

##### **Domestic Violence**

"Felony or misdemeanor crimes of violence committed by a current or former spouse of the victim, by a person with whom the victim shares a child in common, by a person who is cohabitating with or has cohabitated with the victim as a spouse, by a person similarly situated to a spouse of the victim under the domestic or family violence laws of the jurisdiction... or by any other person against an adult or youth victim who is protected from that person's acts under the domestic or family violence laws of the jurisdiction."

##### **Dating violence**

"Violence committed by a person – who is or has been in a social relationship of a romantic or intimate nature with the victim; and where the existence of such a relationship shall be determined based on a consideration of the following factors:

- The length of the relationship
- The type of relationship
- The frequency of interaction between the persons involved in the relationship"

##### **Stalking**

"Engaging in a course of conduct directed at a specific person that would cause a reasonable person to – fear for his or her safety or the safety of others, or suffer substantial emotional distress"

##### **Sexual Assault**

The Campus SaVE Act defines sexual assault, which – unlike domestic violence, dating violence, or stalking – was previously included as a Clery-reportable crime, as "an offense classified as a forcible or non-forcible sex offense under the uniform crime reporting system of the Federal Bureau of Investigation."

The definitions of these terms used for reporting criminal offenses in Wisconsin and training students and employees are not necessarily identical. The College should keep in mind that to satisfy the separate training mandates of the SaVE Act (see Education and Training section in the Checklist), training programs must also incorporate the definitions of domestic violence [domestic abuse Wis. Stats. §813.12; § 968.075], dating violence [§ 813.12, Wis. Stat.], sexual assault [Wis. Stat. § 940.225], and stalking [Wis. Stat. § 940.32] which are used under Wisconsin Law.



# Gender Discrimination and Sexual Misconduct Addendum

## Overview of Expectations with Respect to Consensual Relationships

There are inherent risks in any romantic or sexual relationship between individuals with unequal authority (such as an Instructor and student or supervisor and employee). These relationships may be less consensual than perceived by the individual whose position has the authority. Each of the individuals, particularly in retrospect, also may view the relationship in different ways. Furthermore, circumstances may change, and conduct previously welcomed may become unwelcome and a consensual romantic or sexual relationship may no longer be consensual for both individuals. For the personal protection of all individuals associated with BTC, relationships in which there may be a real or perceived authority (Instructor-student, staff-student, administrator-student) are prohibited.

A consensual romantic or sexual relationship in which there is a direct supervisory or evaluative role over another individual is in violation of the Code of Conduct. Therefore, persons with direct supervisory or evaluative responsibilities who are involved in such relationships must bring those relationships to the immediate attention of their supervisor so arrangements to remedy the supervisory or evaluative conflict can be implemented.

## Definitions

In addition to the following definitions, the Wisconsin statutory definitions of violent acts against women are included in the appendix of this policy.

### Student

Any person who is currently attending and/or enrolled for a course of study, including continuing education, adult and basic skills education, and credit programming with Blackhawk Technical College.

### Consent

Consent is informed, knowing and voluntary participation in any desired sexual activity. Sexual intimacy requires that all participants consent to the activity. Consent between two or more people is defined as an affirmative agreement to engage in sexual activity. Consent can be given by words or actions, as long as those words and actions create a clear and mutually understandable permission regarding the conditions of sexual activity. The person giving the consent must act freely, voluntarily, and with an understanding of his or her actions when giving consent. Lack of protest or resistance does not constitute consent, and silence alone cannot be interpreted as consent. Relying solely on non-verbal communication can lead to misunderstanding. Persons who want to engage in sexual activity are responsible for obtaining consent—it should never be assumed. Consent to one form of sexual activity cannot imply consent to other forms of sexual activity. Previous relationships or consent cannot imply consent to future sexual acts.

Consent must be present throughout the sexual activity – at any time, a participant can communicate that he or she no longer consents to continue the activity. If there is confusion as to whether anyone has consented or continues to consent to sexual activity, it is essential that the participants stop the activity until the confusion can be clearly resolved.

A person who is incapacitated cannot give consent to engage in sexual activity. The issue is whether a reasonable unimpaired person would know that the other person was incapacitated. Incapacitation can result from alcohol or other drug use, unconsciousness, blackout, mental disability, sleep, involuntary physical restraint, or from being drugged. A respondent cannot defend a violation of this policy by claiming that he or she was impaired from alcohol or drug use and unable to tell whether the complainant was incapacitated.

Wisconsin law also states the following individuals are not able to provide consent:

- Individuals who are asleep or unconscious
- Individuals who are unable to communicate consent because of a mental or physical condition
- Generally minors under the age of 16

Blackhawk may conclude that an instance of sexual contact was sexual assault, because it was without another person's consent, even if that conduct would not meet the standard of a criminal sexual assault. For example, it is possible the College would conclude under some circumstances that a person who was intoxicated on alcohol could not consent, and therefore, did not give consent to sexual contact, even though the criminal courts might not reach the same conclusion.

### Coercion

Coercion is defined as compelling someone to act based on:

- An unreasonable amount of pressure
- Harassment
- Threats
- Intimidation

When someone makes clear that he or she does not want to engage in sexual conduct, wants it to stop, or does not wish to go past a certain point of sexual interaction, continued pressure beyond that point is coercive.

### Retaliation

Retaliating directly or indirectly against a person who has, in good faith, filed, supported, or participated in an investigation of a complaint of sexual misconduct, as defined above, is prohibited. Retaliation includes, but is not limited to, ostracizing the person, pressuring the person to drop or not support the complaint, or to provide false or misleading information, or engaging in conduct that may reasonably be perceived to affect adversely that person's educational, living, or work environment. Retaliation also includes similar conduct engaged in by a third party at the complainant's or respondent's request. Depending on the circumstances, retaliation may be unlawful and may constitute a violation of this policy, whether or not the Title IX complaint is ultimately found to have merit.

### Hate Crime

The victim is intentionally selected because of the actual or perceived race, gender, religion, sexual orientation, ethnicity, or disability.

### Bystander Intervention

Bystander intervention gives responsibility to all members of the college community to help ensure the safety of all members within the college. The intervention may be as simple as providing words of support to another student or a faculty or staff member. It may mean more involved



behaviors to let people know that action will be taken. The goal of bystander intervention is to change passive bystanders into active bystanders who feel confident in their ability to "discourage, prevent, or interrupt" a sexual violence incident. Bystander intervention helps grant people the self-efficacy to stand up and speak up when a person is being harassed or assaulted.

### **Sexual Misconduct**

Sexual misconduct is a broad term encompassing any non-consensual behavior of a sexual nature that is committed by force or intimidation, or that is otherwise unwelcome. Sexual misconduct includes:

- Sexual assault
- Sexual exploitation
- Sexual harassment
- Stalking
- Relationship violence (domestic and dating)
- Hostile environment

Sexual misconduct may vary in its severity and consists of a range of behaviors or attempted behaviors. It can occur between strangers or acquaintances, including people involved in an intimate or sexual relationship. Sexual misconduct can occur between members of the same or different gender and can occur while individuals are fully clothed.

### **Sexual Assault**

Sexual assault is defined very broadly by criminal law. It includes a wide variety of conduct from sexual intercourse to sexual contact, without the consent of the other person. Criminal sexual contact can be as limited as a single instance of touching a woman's breast, buttocks, or genital area, or touching a man's buttocks or genital area, without that person's consent, even if the person touched is fully clothed. Other examples of sexual assault include:

- Rape
- Acquaintance rape
- Forcible fondling
- Sodomy (oral or anal intercourse)
- Sexual penetration with an object

### **Sexual Exploitation**

Sexual exploitation involves taking non-consensual sexual advantage of another person, even though the behavior might not constitute one of the other sexual misconduct offenses. Examples can include, but are not limited to the following behaviors:

- Distribution or publication of sexual or intimate information about another person without consent, including by means of social media
- Electronic recording, photographing or transmitting sexual or intimate utterances, sounds, or images without knowledge and consent of all parties
- Engaging in indecent exposure
- Voyeurism – Voyeurism involves both secretive observation of another's sexual activity and secretive observation of another for personal sexual pleasure
- Going beyond the boundaries of consent (such as letting your friends hide in the closet to watch you having consensual sex)

### **Sexual Harassment**

Sexual harassment is defined as unwelcome, gender-based verbal or physical conduct that is sufficiently severe, persistent or pervasive that has the effect of unreasonably interfering with, denying or limiting someone's ability to participate in, or benefit from the College's educational program and/or activities and is based on power differentials. This policy prohibits conduct that would violate Federal and State laws. Sexual harassment includes:

- Unwelcome sexual advances or requests for sexual favors
- Unwelcome verbal or physical conduct of a sexual nature
- Making a submission to, or rejection of, such conduct a factor in academic or employment decisions affecting the student or employee
- Permitting such conduct to unreasonably interfere with a student's academic performance or an employee's work performance
- Unwelcome sexual advances, requests for sexual favors or other verbal or physical conduct of a sexual nature or submission to or rejection of such conduct results in adverse educational or employment action (Quid pro quo)
- Adverse educational or employment action taken against a person because of the person's participation in a complaint or investigation of discrimination or sexual misconduct (retaliatory harassment)

Examples of Sexual Harassment:

- An instructor insists that a student have sex with him or her in exchange for a good grade. This is harassment regardless of whether or not the student submits to the request
- A student repeatedly sends sexually oriented jokes through social media, even when asked to stop, causing one recipient to avoid the sender
- Explicit sexual pictures are displayed in an instructor's office, on a bulletin board in a lab or on a computer monitor in a public space
- An instructor engages students in discussions about their past sexual experiences, yet the conversation is not in any way relevant to the subject matter of the class. An instructor probes for explicit details and demands that students answer although they are clearly uncomfortable and hesitant
- An ex-girlfriend widely spreads false stories about her sex life with her former boyfriend to the clear discomfort of the boyfriend turning him into a social outcast on campus

### **Stalking**

Stalking involves harassment, intimidation, surveillance or a similar course of repeated conduct that is intended to cause a reasonable person to fear for his or her safety or suffer substantial emotional distress, serious physical injury, or death. Stalking includes conduct directed at the victim's immediate family, a spouse or intimate partner. Stalking can also be a form of sexual harassment and/or it can involve a total stranger.

### **Relationship Violence**

Relationship violence is conduct in which the parties involved know each other or had a prior relationship and may include acquaintance rape, dating violence, and domestic violence.

Domestic Violence refers to violence committed by a:

- Current or former spouse or intimate partner
- Current or former cohabitant

- Person with whom a victim shares a child in common
- Person similarly situated to a spouse under domestic or family violence law
- Anyone else protected under domestic or family violence law

### Dating Violence

Dating violence is inappropriate conduct when the parties involved are, or have been, in a romantic or intimate relationship and does not include a causal relationship between two individuals in a business or social context. Whether a relationship exists will depend on the length, type, and frequency of interaction.

### Hostile Environment

Hostile environment includes any situation in which there is harassing conduct that is sufficiently severe, persistent or pervasive such that it alters the conditions of employment or limits, interferes with or denies educational benefits or opportunities, from both a subjective (the alleged victim's) and an objective (reasonable person's) viewpoint.

The determination of whether an environment is "hostile" must be based on all of the circumstances listed here. These circumstances may include, but are not limited to:

- The frequency of the conduct
- The nature and severity of the conduct
- Whether the conduct was physically threatening
- Whether the conduct was humiliating
- The effect of the conduct on the alleged victim's mental or emotional state
- Whether the conduct was directed at more than one person
- Whether the conduct arose in the context of other discriminatory conduct
- Whether the conduct unreasonably interfered with the alleged victim's educational or work performance

### Other Misconduct Offenses (when gender-based)

Threatening or causing physical harm, extreme verbal abuse, or other conduct which threatens or endangers the health or safety of any person. Intimidation, defined as implied threats or acts that cause an unreasonable fear of harm in another. Bullying, defined as repeated and/or severe aggressive behavior likely to intimidate or intentionally hurt, control or diminish another person, physically or mentally.

### Non-Confidential Reporters

All College employees have an obligation to report to a Title IX Coordinator, information regarding sexual misconduct incidents made known to them, or that they have reasonable cause to suspect that such conduct might have occurred. Employees are required to caution students about confidentiality issues and to advise students that the employee is required to report potential or alleged violations of this policy. Even if a student refuses to file a complaint with the College or the police or participate in a disciplinary proceeding, the College may need to further investigate reports of sexual misconduct. To the extent possible, student privacy will be maintained and information will only be shared with individuals on a "need to know" basis.

If you are unsure of someone's responsibilities and duties for maintaining your privacy, ask them BEFORE you talk to them. They should be able to tell you and help you make decisions about who can best help you while maintaining your privacy.

### Training

Sexual misconduct awareness and prevention training take place during Fast Track Days for new students. Additional training and offerings are available online and through Career Services and Leadership Development activities and programming. Resources and training materials can be found on the College website, MyBTC and other publications. In accordance with the College's mission and vision, as well as Federal guidelines, training about the policy and procedures regarding sexual assault and relationship violence is required for all students, instructors, and staff. Best practices identified through the United States Department of Education and Violence Against Women Act (VAWA) are used to develop awareness programming.

Bystander Intervention training will provide resources to assist students when faced with a situation and to safely intervene if someone is at risk of being assaulted. In addition, the College will periodically conduct a campus climate survey to gain a stronger understanding of social issues impacting students, and the effectiveness of College prevention efforts, policies, and resources that address them.

### Blackhawk Policy Application

The College's policy to address cases of alleged sexual misconduct is designed to:

- Consider the rights of the complainant, the rights of the respondent, the safety of the community, and compliance with applicable laws and College policies
- Conduct a timely, fair, impartial, and equitable investigation and adjudication process with thoroughness and respect for all involved parties
- Protect the privacy of all parties to the extent it is practical while balancing the need to perform an investigation, follow the procedures outlined below, comply with applicable law, and maintain campus safety
- Provide appropriate remedies and sanctions to address the discriminatory effects of sexual misconduct on the complainant and others
- Support the needs of the complainant and respondent in the areas of emotional and mental health, physical well-being, and safety from future violence or retaliation

Blackhawk specifically prohibits all forms of sexual misconduct and violence including, but not limited to, rape, acquaintance rape, sexual assault, sexual harassment, dating violence, domestic violence, stalking, and hate crimes between or against members of its college community. This policy will apply regardless of whether a criminal proceeding has been initiated, the conduct occurred on campus, or involved a College-sponsored activity. The College will respond appropriately to address violations of this policy in a manner that is reasonable to prevent such conduct from recurring and to minimize the effects on victims and the College community. Retaliation for filing a report or complaint or for participating in a related investigation or disciplinary proceeding is also a violation of this policy.

In instances where a complaining party insists on confidentiality, it may limit the College's ability to respond. Depending upon the circumstances, the College may not be able to ensure confidentiality because of its obligation to provide a safe and nondiscriminatory environment for all students. Factors that may impact the request include the seriousness of the alleged conduct and whether there have been other complaints

about the same individual. Confidential resources available to consult with students are listed in this policy.

Once a Blackhawk employee (non-confidential reporter) either has been told or should have known about an incident(s) of sexual harassment or sexual misconduct, the College will:

- Take immediate and appropriate steps to investigate what occurred
- Take prompt and effective action to:
- Stop the harassment
- Remedy the effects of the behavior
- Prevent the recurrence of said behavior

## Wisconsin Statutes

### Wisconsin State Law Definitions

WISCONSIN STATUTES § 813.12 DOMESTIC ABUSE RESTRAINING ORDERS AND INJUNCTIONS:

(ag) "Dating relationship" means a romantic or intimate social relationship between 2 adult individuals but "dating relationship" does not include a casual relationship or ordinary fraternization between 2 individuals in a business or social context. A court shall determine if a dating relationship existed by considering the length of the relationship, the type of the relationship, and the frequency of the interaction between the adult individuals involved in the relationship.

(am) "Domestic abuse" means any of the following engaged in by an adult family member or adult household member against another adult family member or adult household member, by an adult caregiver against an adult who is under the caregiver's care, by an adult against his or her adult former spouse, by an adult against an adult with whom the individual has or had a dating relationship, or by an adult against an adult with whom the person has a child in common:

1. Intentional infliction of physical pain, physical injury or illness.
2. Intentional impairment of physical condition.
3. A violation of s. 940.225 (1), (2) or (3).
4. A violation of s. 940.32.
5. A violation of s. 943.01, involving property that belongs to the individual.
6. A threat to engage in the conduct under subd. 1., 2., 3., 4., or 5.

WISCONSIN STATUTES § 940.225 SEXUAL ASSAULT

(1) FIRST DEGREE SEXUAL ASSAULT. Whoever does any of the following is guilty of a Class B felony:

- (a) Has sexual contact or sexual intercourse with another person without consent of that person and causes pregnancy or great bodily harm to that person.
- (b) Has sexual contact or sexual intercourse with another person without consent of that person by use or threat of use of a dangerous weapon or any article used or fashioned in a manner to lead the victim reasonably to believe it to be a dangerous weapon.

(c) Is aided or abetted by one or more other persons and has sexual contact or sexual intercourse with another person without consent of that person by use or threat of force or violence

(2) SECOND DEGREE SEXUAL ASSAULT. Whoever does any of the following is guilty of a Class C felony:

(a) Has sexual contact or sexual intercourse with another person without consent of that person by use or threat of force or violence.

(b) Has sexual contact or sexual intercourse with another person without consent of that person and causes injury, illness, disease or impairment of a sexual or reproductive organ, or mental anguish requiring psychiatric care for the victim.

(c) Has sexual contact or sexual intercourse with a person who suffers from a mental illness or deficiency which renders that person temporarily or permanently incapable of appraising the person's conduct, and the defendant knows of such condition.

(cm) Has sexual contact or sexual intercourse with a person who is under the influence of an intoxicant to a degree which renders that person incapable of giving consent if the defendant has actual knowledge that the person is incapable of giving consent and the defendant has the purpose to have sexual contact or sexual intercourse with the person while the person is incapable of giving consent.

(d) Has sexual contact or sexual intercourse with a person who the defendant knows is unconscious.

(f) Is aided or abetted by one or more other persons and has sexual contact or sexual intercourse with another person without the consent of that person.

(g) Is an employee of a facility or program under s. 940.295 (2) (b), (c), (h) or (k) and has sexual contact or sexual intercourse with a person who is a patient or resident of the facility or program.

(h) Has sexual contact or sexual intercourse with an individual who is confined in a correctional institution if the actor is a correctional staff member. This paragraph does not apply if the individual with whom the actor has sexual contact or sexual intercourse is subject to prosecution for the sexual contact or sexual intercourse under this section.

(i) Has sexual contact or sexual intercourse with an individual who is on probation, parole, or extended supervision if the actor is a probation, parole, or extended supervision agent who supervises the individual, either directly or through a subordinate, in his or her capacity as a probation, parole, or extended supervision agent or who has influenced or has attempted to influence another probation, parole, or extended supervision agent's supervision of the individual. This paragraph does not apply if the individual with whom the actor has sexual contact or sexual intercourse is subject to prosecution for the sexual contact or sexual intercourse under this section.

(j) Is a licensee, employee, or non-client resident of an entity, as defined in s. 48.685 (1) (b) or 50.065 (1) (c), and has sexual contact or sexual intercourse with a client of the entity.

(3) THIRD DEGREE SEXUAL ASSAULT. Whomever has sexual intercourse with a person without the consent of that person is guilty of a Class G felony. Whomever has sexual contact in the manner described in sub. (5) (b) 2. or 3. with a person without the consent of that person is guilty of a Class G felony.

(3m) FOURTH DEGREE SEXUAL ASSAULT. Except as provided in sub. (3), whoever has sexual contact with a person without the consent of that person is guilty of a Class A misdemeanor.

(4) Definitions.

(b) "Sexual contact" means any of the following:

1. Any of the following types of intentional touching, whether direct or through clothing, if that intentional touching is either for the purpose of sexually degrading; or for the purpose of sexually humiliating the complainant or sexually arousing or gratifying the defendant or if the touching contains the elements of actual or attempted battery under s. 940.19 (1):

a. Intentional touching by the defendant or, upon the defendant's instruction, by another person, by the use of any body part or object, of the complainant's intimate parts.

b. Intentional touching by the complainant, by the use of any body part or object, of the defendant's intimate parts or, if done upon the defendant's instructions, the intimate parts of another person.

2. Intentional penile ejaculation of ejaculate or intentional emission of urine or feces by the defendant or, upon the defendant's instruction, by another person upon any part of the body clothed or unclothed of the complainant if that ejaculation or emission is either for the purpose of sexually degrading or sexually humiliating the complainant or for the purpose of sexually arousing or gratifying the defendant.

3. For the purpose of sexually degrading or humiliating the complainant or sexually arousing or gratifying the defendant, intentionally causing the complainant to ejaculate or emit urine or feces on any part of the defendant's body, whether clothed or unclothed.

WISCONSIN STATUTES § 940.32 STALKING

(1) In this section:

(a) "Course of conduct" means a series of 2 or more acts carried out over time, however short or long, that show a continuity of purpose, including any of the following:

1. Maintaining visual or physical proximity to the victim. 940.32(1)(a)2.
2. Approaching or confronting the victim.
3. Appearing at the victim's workplace or contacting the victim's employer or coworkers.
4. Appearing at the victim's home or contacting the victim's neighbors.

5. Entering property owned, leased, or occupied by the victim.

6. Contacting the victim by telephone or causing the victim's telephone or any other person's telephone to ring repeatedly or continuously, regardless of whether a conversation ensues.

6m. Photographing, videotaping, audiotaping, or, through any other electronic means, monitoring or recording the activities of the victim. This subdivision applies regardless of where the act occurs.

7. Sending material by any means to the victim or, for the purpose of obtaining information about, disseminating information about, or communicating with the victim, to a member of the victim's family or household or an employer, coworker, or friend of the victim.

8. Placing an object on or delivering an object to property owned, leased, or occupied by the victim.

9. Delivering an object to a member of the victim's family or household or an employer, coworker, or friend of the victim or placing an object on, or delivering an object to, property owned, leased, or occupied by such a person with the intent that the object be delivered to the victim.

10. Causing a person to engage in any of the acts described in subds. 1. to 9.

WISCONSIN STATUTES § 968.075 DOMESTIC ABUSE INCIDENTS; ARREST AND PROSECUTION.

(1) DEFINITIONS. In this section:

968.075(1)(a)(a) "Domestic abuse" means any of the following engaged in by an adult person against his or her spouse or former spouse, against an adult with whom the person resides or formerly resided or against an adult with whom the person has a child in common:

1. Intentional infliction of physical pain, physical injury or illness.
2. Intentional impairment of physical condition.
3. A violation of s. 940.225 (1), (2) or (3).
4. A physical act that may cause the other person reasonably to fear imminent engagement in the conduct described under subd. 1., 2., or 3.

## Community Resources

In addition to seeking support from internal contacts, there are a number of community resources in Rock and Green Counties available to provide support. You can call or approach any of these people confidentially and tell them what happened. They will listen and explain your options. Talking to any of these people does not constitute reporting the incident to the College.

Sexual Assault Recovery Program – Serving Rock & Green Counties  
Rock County Office  
423 Bluff Street  
Beloit, WI 53511

24 hour hotline: 866-666-4576  
Local: (608) 365-1244 Fax: (608-365-4097

Green County Office  
Monroe Clinic – Hospital Building, 3rd Floor  
515 22nd Avenue  
Monroe, WI 53566  
Local: (608) 324-2444

Beloit Domestic Violence Center  
24 hour hotline: (608) 365-1119  
Local: (608) 364-1083

Green Haven Family Advocates  
1811 11th Street  
Monroe, WI  
Crisis Line: (608) 325-7711  
[www.greenhaven4help.com](http://catalog.blackhawk.edu/student-code-of-conduct/community-resources/www.greenhaven4help.com) (<http://catalog.blackhawk.edu/student-code-of-conduct/community-resources/www.greenhaven4help.com>)

YWCA – Domestic Violence Center/Shelter  
Janesville, WI  
24 hour hotline: (608) 752-2583  
Local: (608) 752-5445  
<http://www.kintera.org/site/c.bjIVK7NFLdJ2E/b.7965643/k.BE00/Home.htm>

Beloit Area Community Health Center  
74 Beloit Mall  
Beloit, WI  
(608) 361-0311

Beloit Memorial Hospital  
1969 W. Hart Road  
Beloit, WI  
(608) 364-5011

Health Net of Janesville (2 locations)  
23 W. Milwaukee Street or 1344 Creston Park  
Janesville, WI  
(608) 756-4638

Mercy Hospital  
1000 Mineral Point Ave  
Janesville, WI  
(608) 756-6000

Monroe Hospital and Clinics  
515 22nd Ave  
Monroe, WI  
(608) 324-2000

St. Mary's Hospital  
3400 E Racine St  
Janesville, WI  
(608) 373-8000

Salvation Army  
(608) 365-6572, Beloit  
(608) 757-8300, Janesville  
(608) 214-5256, Monroe

United Way – Call 211

## Student Organization Conduct

### Standard of Conduct

Student organizations are expected to adhere to the same standards of conduct applicable to individual students. Specific violations of this standard include, but are not limited to:

- Violating or permitting its members or their guests to violate, or failing to prevent where such prevention was possible, the violation of this Code of Conduct or any applicable city, state, or federal regulation;
- Violating or permitting its members or their guests to violate, or failing to prevent where such prevention was possible, the violation of any contract or other agreement between the student organization and the College;
- Committing any act in violation of any policy, procedure or agreement between a student organization and a College official and department, as well as rules promulgated by the appropriate College official and any other rules made applicable to the student organizations.

### Application of Policy

Each use of the term "Student" in this Code of Conduct will refer to and include student organizations and their members. Any violation of this Code of Conduct by one or more members of a student organization may constitute a violation of the organization itself. Where those administering the Student Conduct System conclude that there is sufficient connection between the acts of the individual students and an organization to which they belong, sanctions may be imposed on the organization as well as any offending member. Conversely, when an organization has been found guilty of a Code offense, those administering the Student Conduct System may impose sanctions on some or all members of that organization depending upon the degree of general participation in the offense.

### Membership

Membership in a Student Organization may not be restricted on the basis of race, creed, color, gender, age, religion, national origin, veteran status, disability status, or sexual orientation. A student may not frustrate the College's suspension of a Student Organization by joining, becoming a member of, or in any way assisting or participating in a student organization that is currently on suspension from the College.

### Theft

Theft is defined as taking or possessing the property of another without right or permission. Students will respect the property of the College, its guests, and all members of the College community.

### Prohibited Activities

Specific violations of this standard include, but are not limited to:

- The unauthorized taking, misappropriation, possession, retention, or disposal of any property owned or maintained by the College, another student, a person attending a College-sponsored event, or any other person;



- The unauthorized taking or use of any College-owned or contracted service.

### **Possession of Lost or Misplaced Items**

Any lost or misplaced item that is found should immediately be turned into the proper College office. For instance, items found in the library should be taken to the library's circulation desk. Inquiries concerning lost books, articles of clothing or identification cards should be directed to the Lost and Found located at the Security Office.

## **Weapons, Dangerous Instruments and Explosive Chemicals or Devices on Campus**

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The possession, use or threat of use of any object that may reasonably be believed to cause physical injury to another person is prohibited on all Blackhawk Technical College facilities and all Blackhawk Technical College-sponsored events (on and off-campus).

### **Prohibited Activities**

- A student shall not possess, use, or threaten to use any of the following items on campus:
- Any firearm (including any weapon or instrument from which a shot, projectile, or other objects may be discharged by force, whether operable or inoperable, loaded or unloaded);
- Any deadly weapon, defined as any instrument, item, or material readily capable of causing death or serious physical injury;
- Any BB gun, pellet gun, air rifle, pain gun, stun gun, Taser, sword (whether decorative or not), or other martial arts weapon;
- Any knife (other than an ordinary pocketknife carried in a closed position, with a blade of 3 inches or less or cutlery of a reasonable size, when used in a kitchen or other food preparation area)
- Any explosive chemical or device including a substance or a combination of substances possessed or prepared for the purpose of producing a visible or audible effect by combustion, explosion, deflagration, or detonation, including fireworks and illegal or potentially dangerous chemicals. Note: Possession of a license to possess or use of any of the above items will not constitute a defense of any violation of this section.

Interpretation: This does not prohibit any instrument or chemical expressly authorized for the pursuit of the academic mission of the College and used in an authorized manner consistent with that academic mission.

# CAMPUS SAFETY AND SECURITY

The Safety and Security Office is located on the College's Central Campus.

The College prepares an Annual Security Report in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act, as well as Wisconsin state statutes. A copy of this report may be found at [www.blackhawk.edu/About/Safety-Security](http://www.blackhawk.edu/About/Safety-Security) (<http://catalog.blackhawk.edu/campus-safety/www.blackhawk.edu/About/Safety-Security/>). A copy can also be obtained from the Safety and Security Office.

## Non-Emergency Contact Numbers

- BTC Campus Security Department (608) 757-7617
- Central Campus Welcome Center (608) 758-6900
- Monroe Campus (608) 328-1660
- Center for Transportation Studies (608) 743-4471
- Advanced Manufacturing Training Center (608) 757-7628

## Behavioral Intervention Team (BIT)

The Behavioral Intervention Team (BIT) has been established to serve as a central network focused on prevention and early intervention in college situations involving students showing signs of serious distress or engaging in harmful or disruptive behaviors. The Team develops strategies for and provides referrals or consultations to, college resources when concerns arise about students' well-being or when there is behavior that seems potentially harmful to self and/or others or may be disruptive or threatening. This Team will regularly assess situations in the college community, monitor students for an appropriate period of time, and will recommend actions in accordance with existing college policies.

For more information, please visit [www.blackhawk.edu/About/Safety-Security/Behavior-Intervention-Team](http://www.blackhawk.edu/About/Safety-Security/Behavior-Intervention-Team) (<http://catalog.blackhawk.edu/campus-safety/bit/www.blackhawk.edu/About/Safety-Security/Behavior-Intervention-Team/>).

## Consensual Relations

Positive relationships between students and staff at BTC enrich the college environment and are encouraged. It is natural that interaction between individuals in an academic setting may lead to personal friendships. Personal friendships do not pose problems as long as they do not interfere with academic decisions. However, a consensual romantic or sexual relationship between a student and a staff member may be exploitative and create the appearance of a conflict of interest.

Therefore, students and staff are discouraged from entering into a consensual romantic or sexual relationship while the student is currently enrolled in the staff person's class or when the student is receiving guidance from the person.

As a student, you are urged, for your own protection, to refrain from developing a relationship of a sexual or romantic nature with BTC staff. If you become involved in such a relationship, you are encouraged to contact the BTC Title IX Officer located on Central Campus.

### What is Title IX?

Title IX of the Education Amendments Act of 1972 is a federal law that states, "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."

## Facilities Security and Access

The College has Campus Security; however, they do not have arrest powers. Security officers have the authority to ask persons for identification and to determine whether individuals have lawful business at the college. College security officers have the authority to enforce College and administrative policies as well as the Student Code of Conduct.

The College uses local law enforcement agencies that have jurisdiction over the campuses and centers to investigate and enforce ordinances and criminal laws.

The mission of the College can best be served by providing its students and staff with a secure, safe and appropriate environment for the pursuit of learning, work, and training. To assist in providing this favorable atmosphere, College buildings and grounds are open to all persons who use the facilities in a lawful manner and do not disrupt the educational programming and normal activities of the College. Persons who interfere with or disrupt the College's normal routine, or threaten any person who is using the College's facilities, will be asked to leave the premises. Disruption includes, but is not limited to, the unauthorized entering or accessing of any College building, facility, property, employee work area, service, resource, or activity. Anyone refusing to leave the premises, when requested to do so, may be escorted off the premises and arrested by law enforcement authorities and charged in accordance with appropriate local ordinances.

Under no circumstances will private process servers be given access to students or staff on College property.

Access to and use of Blackhawk facilities are governed by institutional policies and local statutes. Access to facilities is limited to College students, faculty, and staff for work, education, or other related purposes. Outside groups may use the facilities with special permission in accordance with district policy.

## Helpful Phone Numbers

The following is a listing of some of the support resources available in our community. This is not a complete listing of resources. Organizations are not connected with or necessarily endorsed by the college.

### Alcohol and Other Drug Abuse (AODA) Services

- 12 'n 12 Drop In Center, 407 W. Van Buren, Janesville, WI 53548, call (608) 314-1090 or toll-free call
- 1-866-59REHAB (1-866-597-3422)
- AA Alcoholics Anonymous Hotline, 212 N. Jackson, Janesville, WI 53548, call (608) 754-1766 or
- (608) 754-9220; 412 Pleasant St., Beloit, WI 53511, call (608) 364-0520 or go to <http://www.aa.org>
- AA Hotline, 412 Pleasant St., Beloit, WI 53511, call (608) 364-0520
- Al-Anon Hotline, Janesville, call (608) 756-1720

- Alcocare, Inc., call (608) 754-6800; New Dawn facility at 430 N. Jackson St., Janesville, WI 53548 call (608) 754-4166; or The River Commons facility at 786 S. Main, Janesville, WI 53545, call (608) 754-2651
- Alcohol and Drug Abuse Treatment 24/7 Hotline – (608) 328-9352
- Cross Roads Counseling Center, 17 S River St., Suite 254 Janesville, WI 53545, call (608) 755- 5260
- Janesville Alcohol & Drug Treatment Center at (608) 554-4785. Immediate help is also available by calling (toll-free) 1-800-411-0373 or 1-800-752-0771
- Recovery Connection, call 24/7 toll-free at 866-812-8231 or go to [www.recoveryconnection.org](http://www.recoveryconnection.org)
- Rogers Behavioral Help, Call 800-767-4411 or go to [www.rogersbh.org](http://www.rogersbh.org)
- Rosecrance Treatment Centers, 1601 University Dr., Rockford, IL 61107-5317 – 3 main locations – call toll-free at 1-800-252-6465 or go to <http://www.rosecrance.org>
- Intoxicated Driver Program, 113 S Franklin St., PO Box 1649, Janesville, WI 53547, fax (608) 743-2406

## Crisis Intervention Services

- Crisis Intervention Services, 3530 N Cty Trk Hwy F PO Box 1649, Janesville, WI 53547, fax (608) 758-8426 or call (608) 757-5025
- Beloit Domestic Violence Center (24-hour), P.O. Box 476 Beloit, WI 53515, call (608) 365-1119
- First Call United Way, call 211
- Janesville Psychiatric Clinic, 2640 Milton Ave., Janesville, WI 53545, call (608) 755-1475 or 24-hour crisis line at (608) 921-1921
- Pregnancy Helpline, 21 S. Jackson St., Janesville, WI 53548, call (608) 755-9739 or go to <http://www.pregnancy-helpline.net>
- Runaway & Family Treatment Hotline, call 1-800-924-7238
- Suicide Helpline, Call 1-800-273-TALK
- Text CONNECT to 741741
- YWCA (Domestic Violence Assistance) 24-Hour Helpline, call (608) 757-2583

## Safety and Security Procedures

### Accident or Illness Emergency Procedures

Blackhawk uses the professional medical treatment system available in the community to respond to injuries and illnesses. Blackhawk will provide basic medical first aid but will not treat or diagnose any illness or injury. Rather, the student will be referred to an appropriate medical treatment facility. If the student refuses to seek follow-up medical treatment after it has been recommended by a staff member, the student will be asked to sign a waiver corroborating this decision.

The student is responsible for their own transportation to a medical facility. However, should the injury or illness be considered an emergency, an ambulance will be requested. The student will be responsible for the cost of the ambulance. Under no circumstances will College staff transport for treatment. All accidents, regardless of the seriousness, shall be reported to a staff member.

Clean-up after an accident or illness will be left to the College maintenance and custodial staff. Students will not attempt to clean up blood, vomit, or other bodily fluids. If clean-up is necessary, students

should go to the Welcome Center (information desk) at the main entrance and request maintenance/custodial staff to clean up the area.

In case of an emergency, call 911. Classroom and hallway assistance phones can be used to report an emergency by following the posted instructions. Dial 911. The security non-emergency telephone number is 608-757-7617.

### Emergency Campus Security Procedures

In the event of an emergency, call 911 immediately from a campus phone or 911 from a cell phone. An emergency situation can be defined as any event that may pose a significant threat to the life, safety, or health of students and/or employees. After contacting authorities, call the Office of Safety and Security at (608) 757-7617 or contact the College Welcome Center (information center). Students will follow the directions of College staff and emergency services personnel during an emergency.

### Emergency Response Guide and Evacuation Procedures

Each classroom has an emergency response guide and a map indicating what to do in the event of most emergency situations. This includes shelter locations for severe weather and evacuation routes and staging areas for fire emergencies. The College holds evacuation and/or shelter-in-place drills at least once in an academic year. The College also conducts Safety and Security related tabletop exercises in new employee orientation. Please review the Emergency Response Guide regularly to be prepared in the event of an emergency.

### Crime Prevention and Security Procedures

Crime prevention, security procedures, and practice information is presented during new student and employee orientations and periodically during in-service training. In addition, facilities and security personnel conduct routine inspections and patrol of buildings and grounds to identify and correct deficiencies. Being proactive is preferable to being reactive. Crime prevention is based upon the dual concepts of eliminating or minimizing criminal opportunities whenever possible and encouraging students and staff to be responsible for their own security and the security of others. The following is a list of campus crime prevention tactics that may reduce the risk of becoming a victim:

- Walk on established walkways. At night, walk on lighted walkways
- Always lock your vehicle
- If on campus in the evening, park close to the building in lighted areas and walk with others
- Items of value left in the vehicle should be placed out of sight
- Never leave items of value unattended
- Promptly report any suspicious behavior to Campus Security or College Officials
- Do not leave keys or access cards unattended
- Always lock doors in unattended office areas
- Never give out computer passwords
- When working during non-business hours, inform family and colleagues of your location and schedule

### Crime Reporting Procedures

The College encourages prompt and accurate reporting of all crimes or suspicious behavior to local law enforcement, Campus Security and/or College officials. When the alleged behavior or act is a crime and not just a policy violation, College officials will involve local law enforcement

agencies as soon as the information is known. Prompt crime reporting and the reporting of suspicious behavior will better enable local law enforcement officials to remedy the situation.

Report all criminal activity to Campus Security. If unable to reach Campus Security, contact the Welcome Center by dialing 7617 on a campus phone. The College does not have any pastoral or professional counselors on staff but does assist students in providing various private and public options for such services. Crimes may be reported anonymously. To report a crime and/or dangerous situation anonymously, contact Campus Security or the Welcome Center (information center) and inform them you wish to speak with a security official. This same process can be done when making reports to local law enforcement.

Blackhawk complies with the Jeanne Clery Disclosure Act and prepares an annual report of crimes that have occurred on campus and outreach centers. The report can be found on the College's website or may be obtained from Campus Security. The report is also distributed every year by October 1 as required by law. Campus crime, arrest, and referral statistics include those reported to local law enforcement and to College Officials, including anonymous reports. In an effort to obtain the statistics from local law enforcement, Campus Security makes a written request to each local law enforcement agency to obtain a listing of any crimes they had reported to them and/or they had investigated. The reported crimes are also maintained in a daily crime log.

## Timely Warning of Potential Threats

A timely warning will be issued by Campus Security and/or College officials in the event that a situation arises on or off-campus that is considered a significant emergency or a continuing threat to the personal safety of students and staff. The decision to issue a timely warning will be based on information received by the College and, if possible, verified by outside agencies such as law enforcement, Emergency Management, Health Department, National Weather System, etc. Campus Security or College officials will determine the content of the notification and initiate the notification system.

However, a notification may be delayed if outside emergency response agencies believe immediate notification may compromise the safety and security of students and staff.

Campus Security and College officials issue warnings through the College's Safe Alert System and/or the Informacast System and/or email system to students and staff. Other notifications may be used (Blackboard posting, fire alarms, tornado sirens, media releases, etc.) depending on the situation. Campus Security or College officials may determine there is a specific segment of the student and staff population that warrants notification. This decision shall be made in conjunction with the appropriate outside agency. In this case, Campus Security or College officials will determine the best way to notify the specific segment of the campus population.

Anyone with information warranting a timely warning should contact Campus Security or College officials at the Welcome Center or by dialing 6900 on a campus phone.

In situations that may pose an immediate physical threat to members of the campus community, the Campus Security or College Officials may issue warnings through the College's Safe Alert System and/or the Informacast System and/or email system to students and employees.

Depending on the situation, other notification processes may be used (i.e. Blackboard posting, fire alarms, tornado sirens, media releases, etc.).

Campus Security or College Officials may also determine there is a specific segment of students and staff who need notification. This decision will be made in conjunction with the appropriate outside agency. If that is the case, Campus Security or College Officials will make the determination of how to best convey that information to the specific segment of the campus population.

Anyone with information warranting a timely warning should report the circumstances to Campus Security or College Officials. Campus Security or College Officials can be contacted through the Welcome Center (information desk) or by dialing 6900 on a campus phone.

## Visitors and Guests - Code of Conduct

### Philosophy and Purpose

The Code of Conduct for Visitors and Guests at Blackhawk Technical College ("BTC" or the "College") is designed to promote and preserve a safe environment for all who attend and participate in College-sponsored events or use College services. Visitors and guests are subject to federal and state laws, county and municipal ordinances, and applicable policies, procedures, rules, and regulations of the College. Visitors and guests are expected to act responsibly and respect the rights of the College community regardless of age, ancestry, citizenship status, color, creed, ethnicity, gender identity and expression, genetic information, marital status, mental or physical disability, national origin, race, religious affiliation, sex, sexual orientation, or veteran status and any other category protected by federal, state or local law.

### Application and Scope of Jurisdiction

- a. This policy extends to all individuals who do not meet the definition of a member of the College community. This would include visitors to campus, applicants for admission, and former students who are not currently registered or those who have registered for a subsequent term but have not yet paid or made arrangements to pay tuition and/or fees.
- b. Persons not officially enrolled in the College, who by their actions on campus violate their status as invited visitors or guests, are subject to disciplinary action by the College and/or law enforcement.
- c. Certain criminal or civil offenses or other behavior may, by their very nature, pose a serious and substantial danger to the College community. Violations of laws, ordinances, policies, rules, procedures, and regulations will subject the violator to appropriate criminal or civil action.
- d. College jurisdiction regarding discipline under this Policy extends to conduct that occurs on College premises or at off-campus-sponsored activities.
- e. The President of the College authorizes the Office of Safety and Security to enforce this policy including issuing no-trespass orders against College visitors and guests.
- f. Visitors and guests whose behavior leads to subsequent action by Campus Security, including those who are issued a Letter of No Trespass or are escorted from campus, must meet certain requirements before regaining access to College-sponsored events or other campus activities.

## Definitions for the Purpose of this Code

- a. "College community" includes trustees, students, and all employees of the College as well as any independent contractors or other third parties to the extent articulated under contractual agreements.
- b. "College" means Blackhawk Technical College and, collectively, those responsible for its control and operation and applies to all sites at which the College conducts classes and/or activities.
- c. Disruption includes, but is not limited to, the unauthorized entering or accessing of any College building, facility, property, employee work area, service, resource, or activity.
- d. "Student" means an individual who is registered at the College, either full or part-time, in a credit or non-credit course or courses, who has either paid or made arrangements for payment of tuition and/or fees.
- e. "Visitors and guests" means persons who are not members of the College community who are on College premises.
- f. "College-sponsored activity" means any activity that is initiated, authorized, or supervised by the College, or that involves representation of the College.
- g. "College premises" means buildings or grounds owned, leased, operated, controlled, supervised, or temporarily used by the College.
- h. A "Letter of No Trespass" is an order given to a visitor or guest indicating they have violated a College policy or procedure and that they are prohibited from participating in a College-sponsored activity or being present on College premises. A Letter of No Trespass prohibits the recipient from returning to any College-sponsored event or location until rescinded.

## Rights and Responsibilities of Visitors and Guests

Visitors and guests to the College have certain rights and also bear certain responsibilities.

- a. Visitors and guests have the right to freedom of speech, assembly, advocacy, and inquiry. They are responsible for complying with applicable College policies, procedures, rules, and regulations.
- b. Visitors and guests are responsible for exercising their right of personal expression in a manner that is not disruptive or defamatory.
- c. Visitors and guests are responsible for respecting the rights of others.
- d. Blackhawk Technical College is a family-friendly institution that welcomes children to participate in a number of programs and activities. The College recognizes that visitors often need to bring children (defined as persons under the age of 18 who are not students at the College) to campus. Children must at all times be under the direct supervision of a parent, guardian, or an adult. Children must observe the Code of Conduct for Visitors and Guests.

## Prohibited Conduct and Response

The Code of Conduct for Visitors and Guests addresses behavioral actions. The College reserves the right to take criminal and civil action against visitors and guests for misconduct not specifically identified in this Code.

When the actions of visitors and guests rise to the level of criminal behavior or, when they fail to respond to a directive issued by campus security personnel, they are issued a written order or subsequently sent a Letter of No Trespass. In these instances, visitors and guests are escorted from campus or the College-sponsored activity, and the Letter of No Trespass is sent to the appropriate law enforcement agency having jurisdiction. Letters of No Trespass are in effect for a period of no less than one year from the moment they are ordered.

## Procedure to Return after Issuance of a Letter of No-Trespass from the College

Any visitor or guest who is issued a Letter of No-Trespass must meet with specific College personnel to seek permission to return. Visitors and guests who have been issued a Letter of No Trespass and wish to return to any campus location for any reason must first meet with the Manager of Campus Safety and Emergency Preparedness or his/her designee prior to the event and if the no-trespass notice is withdrawn, a withdrawal letter will be issued at that time.

## Appeal

Any visitor or guest issued a no-trespass order may appeal the order to the Office of the Vice President for Administrative Services. The Vice President for Administrative Services will make a final determination on the order.

## Appeal Process

Appeal requests must be made in writing to the Vice President of Administrative Services within five (5) business days after verbal or written notification of the order. A visitor or guest may appeal based upon new evidence that was unknown or unknowable at the time of the investigation and decision to issue the order.

An appeal must include the following information:

- The name, address and telephone number of the party.
- A clear statement explaining the nature and circumstances of the appeal, including the new evidence.

The Vice President of Administrative Services will render and cause a decision to be sent to the visitor/guest within three (3) business days after receipt of the appeal. The appeal decision shall be considered final.

Appeals will be conducted in accordance with the following guidelines:

- The visitor/guest will be provided a full and fair opportunity to present evidence relevant to the issues raised by the visitor/guest relating to the subject matter of the appeal.
- The Vice President of Administrative Services will issue a decision within ten (10) days of the conclusion of the hearing.
- All parties have the right to be assisted by legal counsel at any time during the process.

The preponderance of evidence standard (more likely than not) is used to evaluate complaints.

The decision will be:

- Provided in writing.
- Based solely on the evidence presented in the appeal notice and will include a summary of the evidence and the reasons for the decision.



The decision shall be considered final. The College recognizes the right of all parties involved in a complaint to a fair and equitable resolution of complaints. Falsification, distortion or misrepresentation of information during the course of a complaint resolution process may be grounds for additional action.

# FACULTY

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**Mitchell A. Ziolkowski**

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BS - Winona State



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