BLACKHAWK Technical College

IT-MICROCOMPUTER SPECIALIST (154)

Information provided includes course descriptions by subject only. For complete 2022-2023 programs/academic plans, please refer to Academic Programs (http://catalog.blackhawk.edu/academics/).

154-113 Desktop and Server Hardware
Credits: 1-3

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 - undefined.

Complete Course Listing

154-121 Information Technology Helpdesk and Customer Service
Credits: 1-3

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 - undefined.
Pre-requisites: (154-120) and (150-130) and (154-113)

Complete Course Listing

154-130 IT Exploration
Credits: 1

Students explore the Information Technology (IT) field and the various career options available to them. Customer service skills, ethics in the computer industry, servant leadership, teamwork, time management, and stress management will be covered.
Aid Code: 10 - undefined.

Complete Course Listing

154-131 Hardware Fundamentals: PC Components & Assembly
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, and then use those skills to assemble a computer.
Aid Code: 10 - undefined.

Complete Course Listing

154-132 Hardware Fundamentals: Mobile Devices
Credits: 1

This course gives and in-depth look at various hardware setups, including (but not limited to) laptops, tablets, smartphones, and other mobile devices.
Aid Code: 10 - undefined.

Complete Course Listing

154-133 OS Fundamentals: Microsoft Windows
Credits: 1

Students will gain a working understanding of the Windows 10/11 Operating Systems. Through this understanding they will be able to install, configure, and update Windows 10/11 on various hardware setups.
Aid Code: 10 - undefined.

Complete Course Listing

154-134 OS Fundamentals: Linux & MacOS Essentials
Credits: 1

Students will learn basic Linux & MacOS topics including operating system basics, file management, graphic user interfaces and the command line interface.
Aid Code: 10 - undefined.

Complete Course Listing

154-135 Software Fundamentals: Introduction to Microsoft Office
Credits: 1

Students will learn the various functions of the Microsoft Office software suite, and how to use the word processing, spreadsheet and presentation functions of Microsoft Office software. Students will integrate various functions of several Microsoft packages.
Aid Code: 10 - undefined.

Complete Course Listing

154-136 Software Fundamentals: PC Applications
Credits: 1

Students will learn how to install various business software applications, and explore the different types of business software available to several different industries. They will gain a baseline understanding of different software scenarios, and make different determinations, including but not limited to- cost, software types, and appropriateness of software in a business environment.
Aid Code: 10 - undefined.

Complete Course Listing

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154-137 Network Fundamentals: Introduction to Networking
Credits: 1

Students will learn the basic theories and technologies involved in Local Area Networks & Wide Area Networks. 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.
Aid Code: 10 - undefined.

Complete Course Listing

154-138 Network Fundamentals: Routing & Switching
Credits: 1

Students will learn how to design a structured cabling system for a computer network, install peer-to-peer computer networks, and provide wireless connectivity for a computer network.
Aid Code: 10 - undefined.
Co-requisites: (154-137)

Complete Course Listing

154-139 IT Service Desk: Exploration & Overview
Credits: 1

Students will learn how people, processes, technology, and information affect an IT Service Desk. Students are introduced to industry standard ITIL terminology and practices and develop skills working with customers in a Service Desk setting.
Aid Code: 10 - undefined.

Complete Course Listing

154-140 IT Service Desk: Processes & Procedures
Credits: 1

Students will learn about help desk functions, analyzing help desk software and tools, customer service skills for help desk employees, creating training sessions for end users, creating documentation for computer end users, and developing their own strategies for handling help desk tickets.
Aid Code: 10 - undefined.

Complete Course Listing

154-141 Customer Service: Exploration & Overview
Credits: 1

Students will learn the interpersonal, communication and problem-solving skills required in technical support positions. Exercises provide interaction with other learners in a team. Students explore the information and technical tools needed to function effectively in a support position.
Aid Code: 10 - undefined.

Complete Course Listing

154-142 Customer Service: Soft Skills
Credits: 1

Students will learn nontechnical skills like interpersonal communication, personality traits, body language, and other soft skills, which all play an important role in customer experience.
Aid Code: 10 - undefined.

Complete Course Listing

154-143 Enterprise Fundamentals: Windows Server
Credits: 1

Students will learn the basics of information security, including access control and organizational security policies. This course will include the process of securing user workstations, laptops and mobile devices.
Aid Code: 10 - undefined.

Complete Course Listing

154-144 Enterprise Fundamentals: Information Assurance
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 - undefined.

Complete Course Listing

154-145 Enterprise Fundamentals: Domains & Active Directory
Credits: 1

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 - undefined.
Co-requisites: (154-143)

Complete Course Listing

154-146 Scripting & Programming Basics
Credits: 1

This course is an introduction to programming theory, covering basic elements such as variables, data types, flow control, and design concepts. The course is language-agnostic in nature, and introduces the distinction between interpreted and compiled languages.
Aid Code: 10 - undefined.

Complete Course Listing

154-147 Database Fundamentals: Microsoft SQL
Credits: 1

Students will learn how to use SQL to store, query, and manipulate data. SQL is a special-purpose programming language designed for managing data in a relational database, and is used by numerous apps and organizations.
Aid Code: 10 - undefined.

Complete Course Listing

154-148 Troubleshooting: Hardware & Mobile Devices
Credits: 1

Students will learn how to resolve a number of issues that can occur on various hardware and mobile devices. Troubleshooting a mobile device can be a challenge for the best technician. They will consider a combination of proprietary hardware, unique software, and a mobile platform requires and how to develop a unique set of troubleshooting skills.
Aid Code: 10 - undefined.

Complete Course Listing

154-149 Troubleshooting: OS & Software
Credits: 1

Students will become familiar with operating system and application software troubleshooting methods.
Aid Code: 10 - undefined.

Complete Course Listing

154-150 Troubleshooting: LAN & WAN Connectivity
Credits: 1

Students will utilize the skills acquired from Network Fundamentals & Enterprise Fundamentals to troubleshoot various scenarios in both LAN & WAN environments. Students will be able to clearly demonstrate a working understanding of these Fundamentals to solve simple and complex issues.
Aid Code: 10 - undefined.

Complete Course Listing

154-151 Project Management: Introduction & Overview
Credits: 1

Students will learn the fundamental concepts and principles of project management, such as project life cycles, knowledge areas, and the essential documents used in planning and executing projects.
Aid Code: 10 - undefined.

Complete Course Listing

154-152 Cybersecurity: Introduction & Overview
Credits: 1

In this course, students will learn techniques used to protect the integrity of networks, programs and data from attack, damage or unauthorized access. Concepts of physical security, social engineering, and malicious software will be explored.
Aid Code: 10 - undefined.

Complete Course Listing

154-153 Virtualization: Introduction & Overview
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 - undefined.

Complete Course Listing

154-154 Disaster Recovery: Introduction & Overview
Credits: 1

Students will learn the fundamentals of regaining access and functionality to IT infrastructure after events like a natural disaster, cyber attack, or hardware failure. A variety of disaster recovery (DR) methods will be discussed as part of a disaster recovery plan.
Aid Code: 10 - undefined.

Complete Course Listing

154-155 Information Technology Career Preparation
Credits: 1

Students will visit employers and attend IT position Q&A discussions. Students will prepare a strategy for finding and obtaining a position that best fits their goals and interests.
Aid Code: 10 - undefined.

Complete Course Listing

154-156 Advanced LAN/WAN: Firewall Overview & Exploration
Credits: 1

Students will setup and learn the basic principles of a corporate Firewall. With a partnership with Fortinet, students will use a full featured firewall solution. This course includes an introduction to the Fortinet NSE Certification Path.
Aid Code: 10 - undefined.

Complete Course Listing

154-157 Advanced LAN/WAN: Firewall Configuration
Credits: 1

Students will learn policies, routing, vpn tunneling, traffic shaping, content filtering, and other advanced firewall functionality within the Fortinet framework. This course includes continuation of the Fortinet NSE Certification Path.
Aid Code: 10 - undefined.
Co-requisites: (154-156)

Complete Course Listing

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154-158 Advanced LAN/WAN: Wireless Solutions
Credits: 1

Students will learn various wireless implementations including, wireless routing, wireless transparent bridging, and managed wireless access points.
Aid Code: 10 - undefined.
Co-requisites: (154-156)

Complete Course Listing

154-159 Enterprise Fundamentals: Scripting & Automation
Credits: 1

Students will learn and be introduced to managing and automating Microsoft Windows tasks using the command line. Focuses primarily on Windows PowerShell. Students will become familiar with the Windows PowerShell Console and the Windows PowerShell Integrated Scripting Environment.
Aid Code: 10 - undefined.
Pre-requisites: (154-146)

Complete Course Listing

154-160 Enterprise Fundamentals: Storage
Credits: 1

Students will learn various enterprise storage solutions inclduing: Direct Attached Storage (DAS), Network Attached Storage (NAS), Storage Area Networks (SAN), and cloud storage solutions.
Aid Code: 10 - undefined.

Complete Course Listing

154-161 Enterprise Fundamentals: Hybrid Domains & Azure
Credits: 1

Students will learn how to convert local domains to Hybrid domains, and also learn how to administer Azure cloud domains. Students will learn key Azure fundamentals including networking, computing, and security and how they interact with on-premise workloads.
Aid Code: 10 - undefined.
Pre-requisites: (154-143)

Complete Course Listing

154-162 Virtualization: VMWare Foundations
Credits: 1

Students will learn to work exclusively within the Vmware framework to setup Virtual Machines, networks, and other VMWare best practices and advanced features for a VMware High Availability (HA) environment.
Aid Code: 10 - undefined.

Complete Course Listing

154-163 Virtualization: Hyper-V Foundations
Credits: 1

Students will learn how to work exclusively within the HyperV framework to setup Virtual Machines, networks, and other HyperV best practices and advanced features for a HyperV High Availability (HA) environment.
Aid Code: 10 - undefined.

Complete Course Listing

154-164 Disaster Recovery: Solutions & Implementations
Credits: 1

Students will learn how to utilize key core fundamentals including-preparation, planning, defining objectives, business continuity strategies, testing, and enhancement, to implement a fully working & tested disaster recovery solution.
Aid Code: 10 - undefined.

Complete Course Listing

154-165 Software Fundamentals: Advanced Microsoft Office
Credits: 1

Students will learn advanced functions of the full Microsoft Office Standard suite to enhance their skillset in various areas including- user training, visual data presentation, time management, reporting, and data analytics.
Aid Code: 10 - undefined.
Pre-requisites: (154-135)

Complete Course Listing

154-166 Software Fundamentals: Microsoft Visio
Credits: 1

Students will learn to use Microsoft Visio for various diagramming and flowcharts, including network diagramming, project management flowcharts, and other IT related diagramming.
Aid Code: 10 - undefined.

Complete Course Listing

154-167 IT Service Desk: Technical Reporting
Credits: 1

Students will learn concepts, principles and skills for preparing and presenting 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.
Aid Code: 10 - undefined.

Complete Course Listing

154-168 IT Service Desk: Managing A Service Desk
Credits: 1

Students will learn how to utilize their customer service skills as help desk employees, create training sessions for end users, creating documentation for computer end users, and utilize organizational strategies to complete help desk tickets.
Aid Code: 10 - undefined.
Pre-requisites: (154-140)

Complete Course Listing

154-169 Customer Sevice: End User Training
Credits: 1

Students will use their skills attained in the TSS program to train other students, staff members, and various outside organizations, in a variety of different technology subjects.
Aid Code: 10 - undefined.

Complete Course Listing

154-170 Project Management: Managing & Assessing
Credits: 1

Students will practice identifying risks and managing costs and communications in projects. Students will explore more advanced topics in project management such as quality assurance, transitioning and closing projects, and procurement.
Aid Code: 10 - undefined.

Complete Course Listing

154-171 IT Programs Portfolio
Credits: 1

This course allows IT Program students to develop, create, and implement an IT portfolio project. The completed portfolio projects will be showcased and presented to peers, faculty, and future employers. The student's work will be evaluated by a panel of instructors and employers.
Aid Code: 10 - undefined.
Pre-requisites: (154-161)
Co-requisites: (154-165)

Complete Course Listing

154-172 IT Service Support Internship
Credits: 2

Students will demonstrate their skillsets acquired throughout the program to serve as a qualified intern. This internship will either be provided by a 3rd party (based on staff review/approval), within the BTC organization, or internally within the TSS program.
Aid Code: 10 - undefined.
Pre-requisites: (154-161) and (154-165)

Complete Course Listing

154-173 IT Technical Support Specialist Capstone
Credits: 3

This capstone is a complete review of all of the courses the student has completed throughout the TSS program. A wide series of tests will be performed covering all areas of the TSS program.
Aid Code: 10 - undefined.
Pre-requisites: (154-161)
Co-requisites: (154-165)

Complete Course Listing

154-406 PC Basics and Security
Credits: 0.1-1

Aid Code: 47 - undefined.

Complete Course Listing