

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.

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

- Diagnose, repair and service brake systems
- · Diagnose, repair and service Steering & Suspension Systems
- · Diagnose, repair and service Electrical/Electronic Systems
- Diagnose, repair and service HVAC Systems
- Diagnose, repair and service Drive Train Systems
- · Diagnose, repair and service Hydraulic Systems
- · Diagnose, repair and service Diesel Engines

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

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| 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 |
| 804-315 | Trade Math | 1 |
| | Credits | 14 |
| 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 |



| | Total Credits | 54 |
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| | Credits | 14 |
| 412-496 | ASE Certification Review | 1 |
| 412-495 | Inspection & Maintenance Procedures 4 | 1 |
| 412-494 | Inspection & Maintenance Procedures 3 | 1 |
| 412-493 | Inspection & Maintenance Procedures 2 | 1 |
| 412-492 | Inspection & Maintenance Procedures 1 | 1 |
| 412-497 | Alternate Fuels | 1 |
| 412-491 | Diesel Fuel Systems 4 | 1 |
| 412-490 | Diesel Fuel Systems 3 | 1 |
| 412-489 | Diesel Fuel Systems 2 | 1 |
| 412-488 | Diesel Fuel Systems 1 | 1 |
| 412-487 | Hydraulics 4 | 1 |
| 412-486 | Hydraulics 3 | 1 |
| 412-485 | Hydraulics 2 | 1 |
| 412-484 | Hydraulics 1 | 1 |
| Semester 4 | | |
| | Credits | 13 |
| 442-336 | Shielded Metal Arc Welding 1 | 1 |
| 442-318 | Introduction to Welding | 1 |
| 412-483 | Engine Service Repair 6 | 1 |
| 412-482 | Engine Service Repair 5 | 1 |
| 412-481 | Engine Service Repair 4 | 1 |
| 412-480 | Engine Service Repair 3 | 1 |
| 412-479 | Engine Service Repair 2 | 1 |
| 412-478 | Engine Service Repair 1 | 1 |
| 412-477 | Engine Fundamentals 4 | 1 |
| 412-476 | Engine Fundamentals 3 | 1 |
| 412-475 | Engine Fundamentals 2 | 1 |
| 412-474 | Engine Fundamentals 1 | 1 |
| 412-473 | Advanced Safety Procedures | 1 |
| Semester 3 | Credits | 13 |
| 801-311 | Communication | 2 |
| 412-472 | Diesel HVAC 3 | 1 |
| 412-471 | Diesel HVAC 2 | 1 |
| 412-470 | Diesel HVAC 1 | 1 |
| 412-469 | Electrical Troubleshooting 4 | 1 |
| 412-400 | Electrical Troubleshooting 3 | 1 |
| 412-468 | | - |

General Education Courses Within Program

| Code | Title | Credits |
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| 801-311 | Communication | 2 |
| 804-315 | Trade Math | 1 |