

DIESEL EQUIPMENT MECHANIC

Overview

Diesel Equipment Mechanic Technical Diploma

Program Code: 31-412-1

For more information: [wctc.edu/diesel-mechanic](https://www.wctc.edu/diesel-mechanic/) (<https://www.wctc.edu/diesel-mechanic/>)

Diesel equipment technicians complete service work, replace worn parts and conduct diagnostic tests on heavy-duty equipment and vehicles. In this program, receive classroom and hands-on training in diesel engines, suspension and steering, electronics, drive train, hydraulics, brakes and preventative maintenance, heavy equipment welding and fuel systems, HVAC and refrigeration systems.

The minimum required course grades and program grade point average (GPA) for students under this catalog are:

Core Courses = C
Program GPA = 2.0

Build your degree along a career pathway. Start with a couple of courses or an entry-level credential to enter the job market in your area of interest, then continue with higher credentials on your educational path for job advancement and higher wages.

Career Pathway

1. Diesel Maintenance Technician 22
2. Diesel Equipment Mechanic 45
3. Diesel Equipment Technology 60

Learning Outcomes

Program Outcomes

1. Expand Diagnose, repair and service brake system.
2. Expand Diagnose, repair and service Steering & Suspension Systems.
3. Expand Diagnose, repair and service Electrical/Electronic Systems.
4. Expand Diagnose, repair and service HVAC Systems.
5. Expand Diagnose, repair and service Drive Train Systems.
6. Expand Diagnose, repair and service Hydraulic Systems.
7. Expand Diagnose, repair and service Diesel Engines.

Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multi-cultural, and collaborative**, all students are given opportunities to develop and demonstrate Critical Life Skills, both in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

- **Communication:** Demonstrate appropriate communication.
- **Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.

- **Relationships:** Demonstrate effective interpersonal skills.
- **Self-management:** Demonstrate responsible and respectful behavior.

Required Courses

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. Work with your Academic Advisor to design a program plan!

View your **Program Matrix** to find out when each course will be offered (term and time of day).

Code	Title	Credits
Core Courses		
412-100	Preventative Maint and Inspect	3
412-101	Fund Diesel Elec/Electron Sys	3
412-102	Diesel Brakes and Air Systems	4
412-106	Diesel Elec Sys Diagnostics	3
412-107	Heavy Duty Drivetrains	4
412-108	Diesel Engine Tech	2
Approved Substitute: 412-125		
412-110	Internship-Diesel Equipment	1
412-112	Diesel Engine Repair	4
412-113	Diesel Fuel Systems	4
412-114	Steering and Suspension	4
412-117	Diesel Engine Diagnostics	2
412-118	Basic Shop Skills	2
412-119	Cab Climate and Refrig Sys	3
412-120	Hydraulics Fundamentals	3
442-103	Heavy Equip Welding Fund	2
890-108	Employment Success	1
Total Credits		45

Full-time, Fall Start Plan

First Year

Fall Term 1

Credits

Courses are 8 weeks long and will be offered in either the Fall 1 or Fall 2 term depending upon lab schedules.

412-101	Fund Diesel Elec/Electron Sys	3
412-102	Diesel Brakes and Air Systems	4
412-108	Diesel Engine Tech	2
442-103	Heavy Equip Welding Fund	2
Credits		11

Spring Term 1

Courses are 8 weeks long and will be offered in either the Spring 1 or Spring 2 term depending upon lab schedules.

412-100	Preventative Maint and Inspect	3
412-106	Diesel Elec Sys Diagnostics	3
412-107	Heavy Duty Drivetrains	4
890-108	Employment Success	1
Credits		11

Second Year

Summer Term

412-110	Internship-Diesel Equipment	1
Credits		1

Fall Term 1

Courses are 8 weeks long and will be offered in either the Fall 1 or Fall 2 term depending upon lab schedules.

412-112	Diesel Engine Repair	4
412-114	Steering and Suspension	4
412-117	Diesel Engine Diagnostics	2
Credits		10

Spring Term 1

Courses are 8 weeks long and will be offered in either the Spring 1 or Spring 2 term depending upon lab schedules.

412-113	Diesel Fuel Systems	4
412-118	Basic Shop Skills	2
412-119	Cab Climate and Refrig Sys	3
412-120	Hydraulics Fundamentals	3
Credits		12
Total Credits		45