

DIESEL EQUIPMENT TECHNOLOGY

Overview

Diesel Equipment Technology Associate of Applied Science Degree

Program Code: 10-412-1

For more information: www.wctc.edu/diesel (<http://www.wctc.edu/diesel/>)

As the commercial truck driving industry has experienced growth, so has the need for trained technicians to service and repair heavy-duty equipment and vehicles. In this program, receive training in diesel engines, suspension and steering, electronics, drive train, hydraulics, brakes and preventive maintenance, heavy equipment welding, heavy equipment fuel systems, as well as HVAC and refrigeration systems.

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

Core Courses = C

General Studies 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

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 |
| General Studies | | |
| 801-136 | English Composition 1 | 3 |
| Approved Substitute: 801-223 | | |
| 801-196 | Oral/Interpersonal Comm | 3 |
| Approved Substitute: 801-198 | | |
| 804-107 | College Mathematics | 3 |
| Approved Substitutes: 804-115 OR 804-116 OR 804-118 OR 804-195 OR 804-198 OR (804-304 AND 804-305) | | |
| 809-172 | Intro to Diversity Studies | 3 |
| Approved Substitute: 809-235 | | |
| 809-199 | Psychology of Human Relations | 3 |
| Approved Substitute: 809-198 | | |
| Total Credits | | 60 |

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 |
| 442-103 | Heavy Equip Welding Fund | 2 |
| 412-108 | Diesel Engine Tech | 2 |

| | | |
|----------------|---------------------|-----------|
| 804-107 | College Mathematics | 3 |
| Credits | | 14 |

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 |
| 801-136 | English Composition 1 | 3 |
| 890-108 | Employment Success | 1 |
| Credits | | 14 |

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 |
| 801-196 | Oral/Interpersonal Comm | 3 |
| 809-172 | Intro to Diversity Studies | 3 |
| Credits | | 16 |

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 |
| 809-199 | Psychology of Human Relations | 3 |
| Credits | | 15 |
| Total Credits | | 60 |