

# 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) (<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
<b>Core Courses</b>		
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
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
<b>General Studies</b>		
801-136	English Composition 1	3
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
809-199	Psychology of Human Relations	3
Approved Substitute: 809-198		
<b>Total Credits</b>		<b>60</b>

## 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
	<b>Credits</b>	<b>14</b>

**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
<b>Credits</b>		<b>14</b>

**Second Year****Summer Term**

412-110	Internship-Diesel Equipment	1
<b>Credits</b>		<b>1</b>

**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
<b>Credits</b>		<b>16</b>

**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
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>60</b>