

HEAVY EQUIPMENT MAINTENANCE TECHNICIAN, COA

Program Code: Heavy Equipment Maint Tech-COA

Program Description

This Certificate of Achievement, Heavy Equipment Maintenance Technician, combines with the Diesel General Service Technician Certificate of Achievement to complete the Diesel Equipment Technician AAS adding a deeper level of understanding and experience for systems operations, diagnosis, and repair of heavy equipment. Using the latest technology in diagnosis and repair equipment, this comprehensive training prepares graduates with skills that are in high demand in the diesel repair industry. Combined with the General Service Technician Certificate students will be further prepared to take the ASE T-series of exams and become nationally certified and possibly gain master technician status.

Recommended Course Schedule

1st semester		Units
DT 100	Introduction to Diesel Technologies	2
DT 104	Diesel Equipment Service	4
Communications		3
Semester Total		9
2nd semester		
DT 102	Basic Heavy Duty Electrical Systems	4
DT 105	Mobile Heating and Air Conditioning	3
DT 115	Diesel/Heavy Equipment Electrical Systems	4
DT 117	Advanced Diesel/Heavy Equipment Electronics	4
Semester Total		15
3rd semester		
DT 130	Heavy Duty Hydraulics	3
DT 150	Principles of Diesel Hydraulic Systems	4
DT 205	Diesel/Heavy Equipment Drivetrain and Axles	4
DT 145	Diesel Brake Systems	4
Semester Total		15
Total Units		39

3. Satisfy General Education requirements for the Certificate of Achievement (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).
4. Have no financial or library obligation to the college.

Code	Title	Units
General Education Requirements		
<i>Communications</i>		3
<i>Human Relations</i>		
Satisfied through embedded curriculum in the following courses: DT 102, DT 104, DT 115, DT 130, DT 145, and DT 150.		
<i>Mathematics</i>		
Satisfied through embedded curriculum in the following courses: DT 102, DT 104, DT 115, T 130, DT 145, and DT 150.		
Certificate Requirements		
DT 100	Introduction to Diesel Technologies	2
DT 102	Basic Heavy Duty Electrical Systems	4
DT 104	Diesel Equipment Service	4
DT 105	Mobile Heating and Air Conditioning	3
DT 115	Diesel/Heavy Equipment Electrical Systems	4
DT 117	Advanced Diesel/Heavy Equipment Electronics	4
DT 130	Heavy Duty Hydraulics	3
DT 145	Diesel Brake Systems	4
DT 150	Principles of Diesel Hydraulic Systems	4
DT 205	Diesel/Heavy Equipment Drivetrain and Axles	4
Total Units		39

Program Outcomes

Students completing the certificate will:

PSLO1: Analyze and apply the proper heavy equipment components, diagnosis, rebuild, and repair procedures.

PSLO2: Identify, test, and interpret failed heavy equipment components, and apply appropriate repair strategies.

PSLO3: Analyze and apply appropriate workplace skills and tools, including the application of personal and mechanical safety measures in the workplace.

Program Requirements

Certificates of Achievement can be a stepping stone to an associate degree or allow students to enter the workforce. Certificates of Achievement have a general education component.

To earn a Certificate of Achievement, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 semester credit hours within the college.