

# HEAVY EQUIPMENT TECHNICIAN, TRANSPORTATION TECHNOLOGIES, AAS

## Program Code: Heavy Equipment Technician-AAS

### Program Description

The Associate of Applied Science, Transportation Technologies, Heavy equipment Technician Program trains individuals for apprentice-level positions servicing, repairing, and maintaining medium and heavy equipment vehicles and equipment. The program emphasizes principles of operation, diagnosis and service procedures. Using the latest technology in diagnosis and repair equipment, this comprehensive training prepares graduates with skills that are in high demand in the heavy equipment repair industry.

### Recommended Course Schedule

1st semester		Units
DT 100	Introduction to Diesel Technologies	2
DT 101	Basic Diesel Engines	4
DT 210	Advanced Diesel Engines	4
DT 217	Electronic Diesel Fuel Injection	4
<b>Semester Total</b>		<b>14</b>
2nd semester		Units
DT 102	Basic Heavy Duty Electrical Systems	4
DT 115	Diesel/Heavy Equipment Electrical Systems	4
DT 117	Advanced Diesel/Heavy Equipment Electronics	4
ENG 107	Technical Communications I (or any other English GE course)	3
<b>Semester Total</b>		<b>15</b>
3rd semester		Units
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
<b>Semester Total</b>		<b>15</b>
4th semester		Units
COM 285	Communication Disabilities and Film (Communications/Diversity)	3
Science		3
US/Nevada Constitutions/Fine Arts/Humanities/Social Science		3
DT 105	Mobile Heating and Air Conditioning	3
DT 104	Diesel Equipment Service	4
<b>Semester Total</b>		<b>16</b>
<b>Total Units</b>		<b>60</b>

### Program Requirements

AAS degrees are generally non-transfer degrees designed for students to enter the workforce.

To earn an AAS degree, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 units within the college.
3. Satisfy General Education requirements for the AAS (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).
4. Have no financial or library obligation to the college.

Code	Title	Units
<b>General Education Requirements</b>		
<i>Communications/English</i>		6
<i>Communications</i>		
Required:		
COM 285	Communication Disabilities and Film	
<i>English</i>		
Recommended:		
ENG 107	Technical Communications I	
<i>Fine Arts/Humanities/Social Science</i>		3
Recommended:		
PSC 101	Introduction to American Politics	
or HIST 111	Survey of U.S. Constitutional History	
<i>Human Relations</i>		(3)
Embedded: DT 101, DT 102, DT 104, DT 115, DT 130, and DT 145		
<i>Mathematics</i>		(3)
Embedded: DT 101, DT 102, DT 104, DT 115, DT 130, and DT 145		
<i>Science</i>		3
<b>Additional College requirements</b>		
<i>Diversity</i> <sup>1</sup>		(3)
Required:		
COM 285	Communication Disabilities and Film	
<i>U.S. and Nevada Constitutions</i> <sup>1</sup>		(3)
Recommended:		
PSC 101	Introduction to American Politics	
or HIST 111	Survey of U.S. Constitutional History	
<b>Degree Requirements</b>		
DT 100	Introduction to Diesel Technologies	2
DT 101	Basic Diesel Engines	4
DT 102	Basic Heavy Duty Electrical Systems	4
DT 104	Diesel Equipment Service	4
DT 105	Mobile Heating and Air Conditioning	3
DT 117	Advanced Diesel/Heavy Equipment Electronics	4
DT 115	Diesel/Heavy Equipment Electrical Systems	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
DT 210	Advanced Diesel Engines	4
DT 217	Electronic Diesel Fuel Injection	4
<b>Total Units</b>		<b>60</b>

<sup>1</sup> Course may also count toward degree requirements. Please consult with Academic Advisement.

## Program Outcomes

PSLO1: Identify and implement safety procedures for diagnosis, service, and repair of all major heavy equipment components and systems.

PSLO2: Analyze and interpret diagnostic and test information to formulate correct repair procedures.

PSLO3: Demonstrate correct repair strategies and techniques by applying knowledge of system operation and demonstrating mechanical skills to accomplish repair tasks.