

Heavy Equipment Academy

1st Year Program of Studies 5 courses with total of 18 credit hours

Fall Semester		Credit
DEMR 1401	Shop Safety and Procedures <i>A study of shop safety, rules, basic shop tools, and test equipment.</i>	4
DEMR 1406 <small>*10-Hour OSHA *HOLT CAT ProTech Electricity TG01</small>	Diesel Engines <i>An introduction to the basic principles of diesel engines and systems.</i>	4
Fall Semester Total		8
Spring Semester		Credit
DEMR 1405 <small>*10-Hour OSHA *HOLT CAT ProTech Electricity TG01</small>	Basic Electrical Systems* <i>A review of applied math models and study of different blueprints, with emphasis on machine blueprints and the application of each.</i>	4
DEMR 1416 <small>*HOLT CAT ProTech Hydraulics TM 28</small>	Basic Hydraulics* <i>Fundamentals of hydraulics including components and related systems</i>	4
Spring Semester Total		8
Summer Semester		Credit
DEMR 2288	Internship: Diesel Mechanics Technology/Technician <i>Practical, general workplace training supported by an individualized learning plan.</i>	2
Summer Total		2
Year 1 Program Total		18

2nd Year Program of Studies 4 courses with total of 11 or 12 credit hours

Fall Semester		Credit
DEMR 1329	Preventative Maintenance <i>Introduction to proper servicing practices. Content includes record keeping and condition of major systems.</i>	3
DEMR 2432	Electronic Controls <i>Advanced skills in diagnostic and programming techniques of electronic control systems.</i>	4
Fall Semester Total		6
Spring Semester		Credit
DEMR 2434 <small>*HOLTCAT ProTech Electronic Troubleshooting DE205</small>	Advanced Diesel Tune-Up and Troubleshooting* <i>Advanced concepts & skills required for tune-up & troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach.</i>	4
DEMR 2435	Advanced Hydraulics <i>Advanced study of hydraulic systems & components including diagnostics & testing of hydraulic systems.</i>	4
Spring Semester Total		8
Year 2 Program Total		15

**Level I Certificate of Completion
Diesel Heavy Equipment**

**Level I Certificate of Completion
Advanced Diesel Heavy Equipment**

Two Year Program of Studies: 9 Courses totaling 33 credit hours

Heavy Equipment Academy

Level I Certificate of Completion Diesel Heavy Equipment

ASSOCIATE OF APPLIED SCIENCES

Diesel Construction Equipment Technician

Semester 1	Credit
DEMR 1405 Basic Electrical Systems	4
DEMR 1416 Basic Hydraulics	4
DEMR 1329 Preventative Maintenance	3
MATH 1333 Contemporary Mathematics II or other	3
1st Semester Total	14
Semester 2	Credit
DEMR 1417 Basic Brake Systems	4
DEMR 1406 Diesel Engine	4
ITSC 1301 Introduction to Computers	3
PHYS 1305 Introductory to Physics I Lecture	3
2nd Semester Total	14
Semester 3	Credit
DEMR 2432 Electronic Controls	4
DEMR 1423 Heating, Ventilation, & Air Conditioning	4
DEMR 2435 Advanced Hydraulics	4
ENGL 1301 Composition I	3
Select Social & Behavioral Sciences (80) Core	3
3rd Semester Total	18
Semester 4	Credit
DEMR 2434 Advanced Diesel Tune-Up & Troubleshooting	4
HEMR 1401 Tracks & Undercarriages	4
DEMR 2366 Practicum: Diesel Mechanics Technology Technician	3
Select Language, Philosophy & Culture (40) Core or other*	3
4th Semester Total	14
Program Total	60

DC/AA: 27	Total AAS Hours: 60
Hours needed Post DC/AA: 33	General Academics: 15
	Specific Hours: 15