

DIESEL TECHNOLOGY ACADEMY

1st Year Program of Studies

Courses in blue articulate into associates.

Fall Semester	Credit	Spring Semester	Credit
DEMR 1401 Shop Safety and Procedures A study of shop safety, rules, basic shop tools, and test equipment.	4	DEMR 1405 Basic Electrical Systems* <i>*10-Hour OSHA</i> <i>*HOLT CAT</i> <i>ProTech</i> <i>Electricity TG01</i> A review of applied math models and study of different blueprints, with emphasis on machine blueprints and the application of each.	4
DEMR 1406 Diesel Engines <i>*HOLT CAT</i> <i>ProTech Engine</i> <i>D&A DE 101</i> An introduction to the basic principles of diesel engines and systems.	4	DEMR 1416 Basic Hydraulics* <i>*HOLT CAT</i> <i>ProTech</i> <i>Hydraulics TM 28</i> Fundamentals of hydraulics including components and related systems	4
Fall Semester Total	8	Spring Semester Total	8
Year 1 Total	Level I Certificate of Completion <i>Diesel Heavy Equipment</i>		16

Summer Semester	Credit
DEMR 2288 Internship: Diesel Mechanics Technology/Technician Practical, general workplace training supported by an individualized learning plan.	2
Summer Semester Total	2

2nd Year Program of Studies

Courses in blue articulate into associates.

Fall Semester	Credit	Spring Semester	Credit
DEMR 1329 Preventative Maintenance Introduction to proper servicing practices. Content includes record keeping and condition of major systems.	3	DEMR 2434 Advanced Diesel Tune-Up and Troubleshooting* <i>*HOLT CAT</i> <i>ProTech Electronic Troubleshooting</i> <i>DE205</i> Advanced concepts & skills required for tune-up & troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach.	4
DEMR 2329 Electronic Controls Advanced skills in diagnostic and programming techniques of electronic control systems.	4	DEMR 2435 Advanced Hydraulics Advanced study of hydraulic systems & components including diagnostics & testing of hydraulic systems.	4
Fall Semester Total	8	Spring Semester Total	8
Year 2 Total	Level I Certificate of Completion <i>Advanced Diesel Heavy Equipment</i>		15

Two Year Program of Studies: 11 Courses totaling 34 credit hours

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DIESEL TECHNOLOGY ACADEMY

Level I Certificate of Completion
Diesel Heavy Equipment

ASSOCIATE OF APPLIED SCIENCES

Diesel/Light to Heavy Truck Technology

Courses in blue articulate into associates.

Semester 1	Credit
DEMR 1401 Shop Safety & Procedures	4
DEMR 1406 Diesel Engine	4
DEMR 1330 Steering & Suspension	3
MATH 1332 Contemporary Mathematics or other *	3
1st Semester Total	14
Semester 2	Credit
DEMR 1405 Basic Electrical Systems	4
DEMR 1416 Basic Hydraulics	4
PHYS 1305 Introductory to Physics I Lecture	3
ECON 1301 Introduction to Economics or other*	3
2nd Semester Total	14
Semester 3	Credit
DEMR 1423 Heating, Ventilation, & Air Conditioning	4
DEMR 1421 Power Train	4
3rd Semester Total	8
Semester 4	Credit
DEMR 1329 Preventive Maintenance	3
DEMR 1417 Basic Brake Systems	4
DEMR 2439 Advanced Electrical Systems	4
PHIL 2306 Introduction to Ethics	3
4th Semester Total	14
Semester 5	Credit
DEMR 2434 Advanced Diesel Tune-Up & Troubleshooting	4
DEMR 2366 Practicum—Diesel Mechanics Technology	3
ENGL 1301 Composition 1	3
5th Semester Total	10
Program Total	60

Level I Certificate of Completion
Diesel Heavy Equipment

ASSOCIATE OF APPLIED SCIENCES

Diesel Construction Equipment Technician

Courses in blue articulate into associates.

Semester 1	Credit
DEMR 1401 Shop Safety & Procedures	4
DEMR 1406 Diesel Engine	4
ENGL 1301 Composition I	3
MATH 1333 Contemporary Mathematics II or other*	3
1st Semester Total	14
Semester 2	Credit
DEMR 1405 Basic Electrical Systems	4
DEMR 1416 Basic Hydraulics	4
PHYS 1305 Introductory to Physics I Lecture	3
ECON 2301 Principles of Macroeconomics or other*	3
2nd Semester Total	14
Semester 3	Credit
DEMR 2288 Internship, Diesel Mechanics Technology	2
3rd Semester Total	2
Semester 4	Credit
DEMR 1329 Preventative Maintenance	3
DEMR 2432 Electronic Controls	4
DEMR 1423 Heating, Ventilation, & Air Conditioning	4
PHIL 2306 Introduction to Ethics or other*	3
4th Semester Total	14
Semester 5	Credit
DEMR 2434 Advanced Diesel Tune-Up & Troubleshooting	4
DEMR 2435 Advanced Hydraulics	4
DEMR 1417 Basic Brake Systems	4
HEMR 1401 Tracks & Undercarriages	4
5th Semester Total	16
Program Total	60

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

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