ALAMO COLLEGES

ALAMO ACADEMIES

DIESEL TECHNOLOGY ACADEMY

1st Year Program of Studies

Courses in blue articulate into associate of applied science degree (AAS).

Fall Semester		Credit
DEMR 1401	**Shop Safety and Procedures** A study of shop safety, rules, basic shop tools, and test equipment.	4
DEMR 1406 **HOLT CAT ProTech Engine D&A DE 101*	**Diesel Engines** An introduction to the basic principles of diesel engines and systems.	4
Fall Semester Total		8

Spring Semester		Credit
DEMR 1405 **10-Hour OSHA* **HOLT CAT ProTech Electricity TG01*	**Basic Electrical Systems*** A review of applied math models and study of different blueprints, with emphasis on machine blueprints and the application of each.	4
DEMR 1416 **HOLT CAT ProTech Hyraulics TM 28*	**Basic Hydraulics*** Fundamentals of hydraulics including components and related systems	4
Spring Semester Total		8

Year 1 Total — **Level I Certificate of Completion**
Diesel Heavy Equipment — 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 associate of applied science degree (AAS).

Fall Semester		Credit
DEMR 1329	**Preventative Maintenance** Introduction to proper servicing practices. Content includes record keeping and condition of major systems.	3
DEMR 2432	**Electronic Controls (Articulates only to Diesel Construction Equipment Technician-AAS)** Advanced skills in diagnostic and programming techniques of electronic control systems.	4
Fall Semester Total		7

Spring Semester		Credit
DEMR 2434 **HOLT CAT ProTech Electronic Troubleshooting DE205*	**Advanced Diesel Tune-Up and Troubleshooting*** 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 2435	**Advanced Hydraulics (Articulates only to Diesel Construction Equipment Technician-AAS)** Advanced study of hydraulic systems & components including diagnostics & testing of hydraulic systems.	4
Spring Semester Total		8

Year 2 Total — **Level I Certificate of Completion**
Advanced Diesel Heavy Equipment — 15

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

The Alamo Colleges do not discriminate on the basis of race, religion, color, national origin, sex, age, or disability with respect to access, employment programs, or services. Inquiries or complaints concerning these matters should be brought to the attention of: Director of Employee Services, Title IX Coordinator, (210) 485-0200.

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 associate of applied science degree (AAS).

Semester 1		Credit
DEMR 1401	Shop Safety & Procedures	4
DEMR 1406	Diesel Engine	4
DEMR 1405	Basic Electrical Systems	4
DEMR 1416	Basic Hydraulics	4
1st Semester Total		16

Semester 2		Credit
DEMR 1330	Steering & Suspension	3
DEMR 1421	Power Train	4
DEMR 1417	Basic Brake Systems	4
DEMR 2439	Advanced Electrical Systems	4
2nd Semester Total		15

Semester 3		Credit
DEMR 1423	Heating, Ventilation, & Air	4
DEMR 1329	Preventive Maintenance	3
DEMR 2434	Adv Diesel Tune-Up & Troubleshooting	4
3rd Semester Total		11

Semester 4		Credit
ECON 1301	Introduction to Economics or Other*	3
PHIL 2306	Introduction to Ethics	3
DEMR 2366	Practicum - Diesel Mechanics Technology	3
4th Semester Total		9

Semester 5		Credit
MATH 1332	Contemporary Math or Other*	3
PHYS 1305	Introduction to Physics I Lecture	3
ENGL 1301	Composition 1	3
5th Semester Total		9

Program Total	60

DC/DTA: 23	Total AAS Hours: 60
Hours needed Post DC/DTA: 37	General Academics: 15
	Specific Hours: 45

Level I Certificate of Completion
Diesel Heavy Equipment

ASSOCIATE OF APPLIED SCIENCES

Diesel Construction Equipment Technician

Courses in blue articulate into associate of applied science degree (AAS).

Semester 1		Credit
DEMR 1401	Shop Safety & Procedures	4
DEMR 1406	Diesel Engine	4
ENGL 1301	Composition I	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 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 &	4
DEMR 2435	Troubleshooting Advanced Hydraulics	4
DEMR 1417	Basic Brake Systems	4
HEMR 1401	Tracks & Undercarriages	4
5th Semester Total		16

Program Total	60

DC/DTA: 33	Total AAS Hours: 60
Hours needed Post DC/DTA: 27	General Academics: 15
	Speci ic Hours: 45

See St. Philip's College degree description for more information: http://myspccatalog.alamo.edu/