

## DIESEL TECHNOLOGY ACADEMY

### 1st Year Program of Studies

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

Fall Semester	Credit	Spring Semester	Credit
<b>DEMR 1401</b> <b>Shop Safety and Procedures</b> A study of shop safety, rules, basic shop tools, and test equipment.	4	<b>DEMR 1405</b> <b>Basic Electrical Systems*</b> <i>*10-Hour OSHA</i> <i>*HOLT CAT</i> <i>ProTech</i> <i>Electricity TG01</i>	4
<b>DEMR 1406</b> <b>Diesel Engines</b> <i>*HOLT CAT</i> <i>ProTech Engine</i> <i>D&amp;A DE 101</i>	4	<b>DEMR 1416</b> <b>Basic Hydraulics*</b> <i>*HOLT CAT</i> <i>ProTech</i> <i>Hydraulics TM 28</i>	4
<b>Fall Semester Total</b>	<b>8</b>	<b>Spring Semester Total</b>	<b>8</b>
<b>Year 1 Total</b>	<b>Level I Certificate of Completion</b> <i>Diesel Heavy Equipment</i>		<b>16</b>

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

### 2nd Year Program of Studies

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

Fall Semester	Credit	Spring Semester	Credit
<b>DEMR 1329</b> <b>Preventative Maintenance</b> Introduction to proper servicing practices. Content includes record keeping and condition of major systems.	3	<b>DEMR 2434</b> <b>Advanced Diesel Tune-Up and Troubleshooting*</b> <i>*HOLT CAT</i> <i>ProTech Electronic Troubleshooting</i> <i>DE205</i>	4
<b>DEMR 2432</b> <b>Electronic Controls</b> Advanced skills in diagnostic and programming techniques of electronic control systems.	4	<b>DEMR 2435</b> <b>Advanced Hydraulics</b> Advanced study of hydraulic systems & components including diagnostics & testing of hydraulic systems.	4
<b>Fall Semester Total</b>	<b>7</b>	<b>Spring Semester Total</b>	<b>8</b>
<b>Year 2 Total</b>	<b>Level I Certificate of Completion</b> <i>Advanced Diesel Heavy Equipment</i>		<b>15</b>

**Two Year Program of Studies: 11 Courses totaling 34 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.*

**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 1466	Basic Hydraulics	4
<b>1st Semester Total</b>		<b>16</b>
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
<b>2nd Semester Total</b>		<b>15</b>
Semester 3		Credit
DEMR 1423	Heating, Ventilation, & Air	4
DEMR 1329	Preventive Maintenance	3
DEMR 2434	Adv Tune-Up & Troubleshooting	4
<b>3rd Semester Total</b>		<b>11</b>
Semester 4		Credit
ECON 1301	Introduction to Economics or Other*	3
PHIL 2306	Introduction to Philosophy	3
DEMR 2366	Practicum - Diesel Mechanics Technology	3
<b>4th Semester Total</b>		<b>9</b>
Semester 5		Credit
MATH 1332	Contemporary Math or Other*	3
PHYS 1305	Introduction to Physics I Lecture	3
ENGL 1301	Technology Composition 1	3
<b>5th Semester Total</b>		<b>9</b>
<b>Program Total</b>		<b>60</b>

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
<b>1st Semester Total</b>		<b>14</b>
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
<b>2nd Semester Total</b>		<b>14</b>
Semester 3		Credit
DEMR 2288	Internship, Diesel Mechanics Technology	2
<b>3rd Semester Total</b>		<b>2</b>
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
<b>4th Semester Total</b>		<b>14</b>
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
<b>5th Semester Total</b>		<b>16</b>
<b>Program Total</b>		<b>60</b>

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