

## **DIESEL TECHNOLOGY**

*Eagle Pass Campus*

### **Purpose**

The purpose of the Diesel Technology program is to provide students with training in maintaining, troubleshooting, and repairing heavy-duty diesel powered equipment. Coursework emphasizes diesel engines, hydraulics, electrical, air conditioning, and diesel fuel injection systems. The goal of the program is for graduates to be employable as entry-level technicians in a service shop or dealership. Typical diesel industry employers include truck and automobile dealerships, trucking, bus, and construction companies; and firms that rent or lease trucks.

### **Admission Requirements**

Students are admitted to the Diesel Technology program through regular college admission procedures (*see Admission Regulations section*). Students who complete the required program courses must make a formal application for graduation (*see Curricula section*).

The Diesel Technology program carries three award options, a one-year Certificate, two-year Certificate, and an Associate of Applied Science (A.A.S.) degree. College Board policy requires all students to take the Accuplacer examination. Students pursuing the one-year Certificate do not have to pass the Accuplacer; however, those not scoring at the READ 0302 level are encouraged to enroll in the appropriate developmental course(s).

Students who wish to pursue the two-year Certificate and/or the A.A.S. degree must meet all Texas Success Initiative (TSI) requirements.

## DIESEL TECHNOLOGY ONE-YEAR CERTIFICATE

### Program of Study

	<u>Fall Semester</u>	<u>Credit</u>		<u>Spring Semester</u>	<u>Credit</u>
ORIE 0100 $\pi$ or COLS 0300	New Student Orientation		DEMR 1449 <sup>1</sup>	Diesel Engine II.....	4
	College Success Skills		DEMR 1417	Basic Brake Systems .....	4
			DEMR 1421	Power Train I.....	4
DEMR 1229	Preventative Maintenance .....	2		Total .....	12
DEMR 1406	Diesel Engine I.....	4			
DEMR 1405	Basic Electrical Systems .....	4		Total Credit Hours for Certificate .....	25
DEMR 1301	Shop Safety and Procedures .....	3			
	Total .....	13			

- Notes: 1 Capstone course that consolidates the student's learning experiences.  
 $\pi$  All students are required to take ORIE 0100 or COLS 0300; however, ORIE 0100/COLS 0300 do not count toward degree requirements.

## DIESEL TECHNOLOGY TWO-YEAR CERTIFICATE

### Program of Study

#### FIRST YEAR

	<u>Fall Semester</u>	<u>Credit</u>		<u>Spring Semester</u>	<u>Credit</u>
ORIE 0100 $\pi$ or COLS 0300	New Student Orientation		DEMR 1449 <sup>1</sup>	Diesel Engine II.....	4
	College Success Skills		DEMR 1417	Basic Brake Systems .....	4
			DEMR 1421	Power Train I.....	4
DEMR 1229	Preventative Maintenance .....	2		Total .....	12
DEMR 1406	Diesel Engine I.....	4			
DEMR 1405	Basic Electrical Systems .....	4			
DEMR 1301	Shop Safety and Procedures .....	3			
	Total .....	13			

#### SECOND YEAR

	<u>Fall Semester</u>	<u>Credit</u>		<u>Spring Semester</u>	<u>Credit</u>
DEMR 1423	Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair.....	4	DEMR 2348	Failure Analysis .....	3
DEMR 1410	Diesel Engine Testing and Repair I .....	4	DEMR 2432	Electronic Controls.....	4
DEMR 1447	Power Train II.....	4	DEMR 2281 <sup>1</sup>	Coop Education – Diesel Mechanics Technology/Technician .....	2
	Total .....	12	DEMR 1330	Steering and Supervision I .....	3
				Total .....	12
				Total Credit Hours for Certificate .....	49

- Notes: 1 Capstone course that consolidates the student's learning experiences.  
 $\pi$  All students are required to take ORIE 0100 or COLS 0300; however, ORIE 0100/COLS 0300 do not count toward degree requirements.

**DIESEL TECHNOLOGY  
ASSOCIATE OF APPLIED SCIENCE DEGREE**

	<u>Credit</u>
General Education Courses:	
Social & Behavioral Sciences	3
Humanities & Fine Arts	3
Natural Science & Math	3
Other	7
Total General Education Courses.....	16
Technical Education Courses.....	49
Total Credit Hours for A.A.S. ....	65

**Program of Study**

**FIRST YEAR**

	<u>Fall Semester</u>	<u>Credit</u>	<u>Spring Semester</u>	<u>Credit</u>
ORIE 0100π or COLS 0300	New Student Orientation College Success Skills		DEMR 1449 Diesel Engine II..... DEMR 1417 Basic Brake Systems..... DEMR 1421 Power Train I..... COSC 1401 Microcomputer Applications.....	4 4 4 4
DEMR 1229	Preventative Maintenance .....	2		
DEMR 1406	Diesel Engine I .....	4		
DEMR 1405	Basic Electrical Systems .....	4		
DEMR 1301	Shop Safety and Procedures .....	3		
ELECTIVE	Humanities & Fine Arts .....	3		
	Total .....	16	Total .....	16
	<u>Summer Session</u>	<u>Credit</u>		
ELECTIVE	Speech Communications .....	3		
ELECTIVE	Social and Behavioral Sciences.....	3		
	Total .....	6		

**SECOND YEAR**

	<u>Fall Semester</u>	<u>Credit</u>	<u>Spring Semester</u>	<u>Credit</u>
DEMR 1423	Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair.....	4	DEMR 1330 Steering and Suspension I..... DEMR 2348 Failure Analysis..... DEMR 2432 Electronic Controls..... DEMR 2281 <sup>1</sup> Cooperative Education – Diesel Mechanics Technology/Technician.....	3 3 4 2
DEMR 1447	Power Train II.....	4		
DEMR 1410	Diesel Engine Testing and Repair I .....	4		
ELECTIVE	College Level Mathematics .....	3		
	Total .....	15	Total .....	12
			Total Credit Hours for A.A.S. ....	65

- Notes: 1 Capstone course that consolidates the student's learning experiences.  
π All students are required to take ORIE 0100 or COLS 0300; however, ORIE 0100/COLS 0300 do not count toward degree requirements.

### **Tuition and Fees**

Standard tuition and fees are assessed to each student as indicated in *Finances* section. Lab and uniform fees are also assessed (*see Course Descriptions*). Each student can also expect to purchase the following required textbooks and tools.

1 Tool Set\* (*approximate cost*).....\$600

\* A tool list will be provided by instructor.

Textbooks (*approximate cost*)      \$225