

DIESEL TECHNOLOGY

Diesel Technology

Certificate and Associate of Applied Science

The Diesel Technology industry is a rapidly growing industry which is requiring a growing number of qualified technicians. The Diesel Technology student will acquire the knowledge and skills necessary for the repair of diesel engines, electrical and electronic control systems, hydraulic systems, air brakes, suspension, steering, and transmissions through a combination of lecture and lab work, to include troubleshooting and diagnostic procedures.

Program Learning Outcomes Certificate

1. Students will demonstrate a fundamental knowledge of diesel engines and perform repairs.
2. Students will be able to diagnose and service air brake systems.
3. Students will be able to troubleshoot and repair electrical systems.
4. Students will be able to demonstrate an understanding of pressure and flow in hydraulic systems.
5. Students will be able to troubleshoot and repair vehicle electronic systems using diagnostic service equipment.

Associate of Applied Science

1. Students will be able to demonstrate a fundamental knowledge of diesel engines and perform repairs.
2. Students will be able to diagnose and service air brake systems.
3. Students will be able to troubleshoot and repair electrical systems.
4. Students will be able to demonstrate an understanding of pressure and flow in hydraulic systems.
5. Students will troubleshoot and repair vehicle electronic systems using diagnostic service equipment.

Advisory Committee Members

Richard Estevanes, Owner PR/GM, Mid Valley Truck & Trailer, Chair of Advisory Committee
Sigifredo Gandaria, Service Manager, Rush Truck Center
Ted Ackerman, Service Manager, Thermo King
Guadalupe Pena, Service Manager, Holt (Trucks)
Guadalupe Guajardo Jr., Service Manager, Holt Cat

Scott Freeman, Shop Foreman, HEB
Robert Canales, District Manager, Waste Connections
Kathy Stanfill, Service Manager, Shop Advisor, Doggett Freightliner
Omar Rios, Shop Foreman, Briggs Equipment
Rigoberto Martinez, Shop Foreman, Mobile Service
Miguel Arellano, Shop Foreman, Waste Connections
Juan Pena, Service Manager, Doggett Freightliner

Certificate

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Associate Degree

- Diesel Technology Associate of Applied Science (p. 1)

Diesel Technology Certificate

TSI Exempt

Course	Title	Credit Hours
Fall		
DEMR 1401	Diesel Shop Safety and Procedures	4
DEMR 1405	Basic Electrical Systems	4
DEMR 1410	Diesel Engine Testing and Repair I	4
DEMR 1229	Preventative Maintenance	2
Credit Hours		14
Spring		
DEMR 1442	Power Train Applications I	4
DEMR 2432	Electronic Controls	4
DEMR 1416	Basic Hydraulics	4
DEMR 1323	Heating, Ventilation, and Air Conditioning Troubleshooting and Repair	3
Credit Hours		15
Summer		
WLDG 1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
DEMR 1417	Basic Brake Systems	4
DEMR 1230	Steering and Suspension I	2
DEMR 1303	Basic Driving Skills	3
Capstone: Successful completion of a departmental exit exam		
Credit Hours		13
Total Credit Hours		42

Diesel Technology Associate of Applied Science

TSI Liable

Course	Title	Credit Hours
First Year		
Fall		
DEMR 1401	Diesel Shop Safety and Procedures	4
DEMR 1405	Basic Electrical Systems	4
DEMR 1410	Diesel Engine Testing and Repair I	4
DEMR 1229	Preventative Maintenance	2
Credit Hours		14
Spring		
DEMR 1442	Power Train Applications I	4
DEMR 2432	Electronic Controls	4
DEMR 1416	Basic Hydraulics	4
DEMR 1323	Heating, Ventilation, and Air Conditioning Troubleshooting and Repair	3
Credit Hours		15
Second Year		
Fall		
WLDG 1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
DEMR 1417	Basic Brake Systems	4
DEMR 1230	Steering and Suspension I	2
DEMR 1303	Basic Driving Skills	3
DEMR 1266	CAPSTONE: Practicum	2
Credit Hours		15

Spring

Math and Natural Sciences Elective ¹	4
Social and Behavioral Sciences Elective ¹	3
Humanities Elective ¹	3
SPCH 1318 Interpersonal Communications ¹	3
ENGL 1301 Composition I ¹	3
Credit Hours	16
Total Credit Hours	60

¹ Identifies courses to fulfill minimum 15 credit hour General Education requirement