

DIESEL AND RELATED TECHNOLOGY

Pathway: Advanced Transportation & Manufacturing

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Award Title	Award Type	GE Units	Required Course Units	Major Elective Units	Major Units
Diesel and Related Technology*	A.S.	21*	45	-	45
Diesel and Related Technology	C		45	-	45

At least 60 degree applicable units are required to earn an Associate degree.

*This Associate Degree is eligible for a reduction of General Education requirements from 21 to 18 units; please consult with a counselor for more details.

For additional related degrees and certificates, refer to programs under Automotive Collision Repair, Automotive Technology, Hybrid & Electric Technology, Motorcycle Repair Mechanics and Rail Vehicle Maintenance.

PROGRAM OVERVIEW

If you live in the United States, almost every single thing you eat, wear or use has been transported by diesel powered vehicles and alternative/green power plants.

If you live in the United States, almost every single thing you eat, wear or use was delivered by a diesel-powered vehicle.

New EPA/CARB regulations have impacted the fuel technology and energy source/design used. Trucks, trains, buses and many other medium and heavy duty vehicles have evolved to match today's more stringent clean air emission standards. Graduates of the Diesel Technology program are well paid and have a diverse choice of areas in which to specialize. In recent years, the demand from local employers has exceeded our supply of qualified graduates as the program continues to grow.

After successful completion of the program requirements, students will become proficient in all aspects of diesel engine fundamentals, electrical components, fuel systems, overhaul procedures, air brake system and the construction and operation of diesel engines.

PROGRAM LEARNING OUTCOMES (PLOs)

Upon completion of the Degree/Certificate program, students are able to:

1. Identify and explain the operation of diesel vehicle systems (such as engine, transmissions, brakes, electrical and suspension) along with their related subsystems and related industry standards.
2. Diagnose and repair diesel powered vehicles and systems using various manufacturer diagnostic software, tools, and shop equipment in accordance with industry standards.



DIESEL AND RELATED TECHNOLOGY

Associate in Science Degree

Major Units: 45

Requirements for the Associate in Science degree in Diesel and Related Technology may be met by completing 45 units of Required Courses with a "C" or better along with General Education units. Information on the General Education unit requirements may be found in the catalog under Graduation Requirements.

REQUIRED COURSES

SEMESTER I UNITS

DIESLTK 112	Diesel Engine and Electrical Fundamentals	11
-or-		
DIESLTK 112A	Diesel Engine Fundamentals (5.5)	
- and -		
DIESLTK 112B	Diesel Engine Fundamentals (5.5)	

SEMESTER II UNITS

DIESLTK 122	Diesel Fuel Injection Systems & Basic Hydraulics and Air Conditioning	11
-or-		
DIESLTK 122A	Diesel Fuel Injection Systems (5.5)	
- and -		
DIESLTK 122B	Basic Hydraulics and Air Conditioning Systems (5.5)	

WELDG/E 201A	Welding-Gas and Electric IA (may be taken in either 1st or 2nd semester)	1
-or- DIESLTK 185	Directed Study - Diesel and Related Technology (1)	

Admission to third semester courses is limited to those who have received a grade of "C" or better in all first year Diesel courses.

SEMESTER III UNITS

DIESLTK 132	Heavy Duty Drive Train & Air Brake Systems	11
-or-		
DIESLTK 132A	Heavy Duty Drive Train (5.5)	
- and -		
DIESLTK 132B	Air Brake Systems (5.5)	

SEMESTER IV UNITS

DIESLTK 142	Diesel Engine Overhaul & Electronic Engine Controls	11
-or-		
DIESLTK 142A	Diesel Engine Overhaul (5.5)	
- and -		
DIESLTK 142B	Electronic Engine Controls (5.5)	

NOTE: Students are required to provide basic hand tools, Transportation Technology uniform and personal safety equipment.

DIESEL AND RELATED TECHNOLOGY

■ Certificate of Achievement

Major Units: 45

A Certificate of Achievement in Diesel and Related Technology may be earned by completing 45 units of Required Courses listed under the Associate degree in Diesel and Related Technology with a "C" or better in each course.

By fulfilling the program requirements, students are able to enter the job market as diesel technicians.

USEFUL LATTC LINKS:

College Catalog: <http://college.lattc.edu/catalog/>

Financial Aid Office: <http://college.lattc.edu/financialaid/>

Counseling Department: <http://college.lattc.edu/counseling/>

General Education Information: <http://college.lattc.edu/catalog>

Advanced Transportation & Manufacturing Pathway:
<http://pathways.lattc.edu/atm>

You can register in these classes by logging on to the Student Information System at <http://college.lattc.edu/student/new-students/register-now/>

For additional information consult a LATTC college counselor.