DIESEL AND RELATED TECHNOLOGY



Pathway: Advanced Transportation & Manufacturing Office: B1-Room 225 Email: <u>ATMpathway@lattc.edu</u> Phone: (213) 763-7081

		Units	Units	Units
A.S.	21*	45	-	45
С		45	-	45
P	A.S. C	A.S. 21* C	A.S. 21* 45 C 45	A.S. 21* 45 - C 45 -

At least 60 degree applicable units are required to earn an Associate degree *GE Units requirements may be fulfilled by completing any General Education Pattern; please consult with a counselor for more details. These programs are Financial Aid Eligible.

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:

- 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.
- Diagnose and repair diesel powered vehicles and systems using various manufacturer diagnostic software, tools, and shop equipment in accordance with industry standards.

USEFUL LATTC LINKS:

College Catalog, Class Schedule & more: <u>http://www.lattc.edu/</u> academics

Financial Aid Office: <u>http://www.lattc.edu/services/financial-aid</u> Counseling Services & Support: <u>http://www.lattc.edu/services/support</u> Advanced Transportation & Manufacturing Pathway: <u>http://www.lattc.edu/ATM</u>

To register: <u>http://www.lattc.edu/student-guides/new-student-guide</u>

For additional information consult a LATTC college counselor.



400 W. Washington Blvd. Los Angeles, CA 90015 www.lattc.edu

DIESEL AND RELATED TECHNOLOGY

Associate in Science Degree Major Units: 45

Requirements for the Associate in Science degree in <u>Diesel and Related Technology</u> may be met by completing <u>45 units</u> of Required Courses with a "C" or better along with <u>General Education units</u>. 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			
-O/-				
DIESLTK 112A Diesel Engine Fundamentals (5.5) - and -				
DIESLTK 112B Electrical Fundamentals (5.5)				
SEMESTER II	UNITS			
DIESLTK 122 Diesel Fuel Injection Systems & Basic Hydraulics	11			
and Air Conditioning				
-O/-				
DIESLTK 122A Diesel Fuel Injection Systems (5.5) - and -				
DIESLTK 122B Basic Hydraulics and Air Conditioning Systems	s (5.5)			
WELDG/E 201A Welding-Gas and Electric IA	1			
(may be taken in either 1st or 2nd semester)				
-or- DIESLTK 185 Directed Study – Diesel and Related Technolo	ogy (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			

SEMESTER III		UNITS	
DIESLTK 132 He	avy Duty Drive Train & Air Brake Systems	11	
-0 <i>r</i> -			
DIESLTK 132A	Heavy Duty Drive Train (5.5)		
- and -			
DIESLTK 132B	Air Brake Systems (5.5)		

UNITS

SEMESTER IV

DIES	LTK 142 Die	esel Engine Overhaul & Electronic Engine Controls	1
-0r-			
	DIESLTK 142A	Diesel Engine Overhaul (5.5)	
	- and -		
	DIESLTK 142B	Electronic Engine Controls (5.5)	
		8 ()	

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 <u>Diesel and Related Technology</u> may be earned by completing <u>45 units</u> 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.

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