DIESEL TECHNOLOGY ITC

The Diesel Technology Program provides a well-rounded education in the service and repair of trucks and heavy equipment related to areas including farming, logging, marine, locomotive, and construction. A specified set of tools is required upon entry. The tool list can be found on the program website.

Students are provided theory in shop practice, diesel engines, safety, hydraulics, DC electrical systems and microcomputers, power trains, brakes, and chassis and suspension. The student will also receive comprehensive safety training applicable to the work environment. Diesel technician positions can be found in all areas and locations in the world. Work includes both indoor and outdoor opportunities. All students will be subject to a Driver's License Validation check and must hold a valid driver's license while enrolled in the mechanics programs. This program has physical requirements that may affect the student's ability to perform in this program.

Admission requirements

1. Complete general LC State admission requirements
2. Submit college placement exam scores
3. Schedule consultation with program faculty

Entrance requirements for Intermediate Technical Certificate (ITC) degree seeking students include:

- A valid driver's license with no DUI conviction within the past year.
- Physical recommendations as listed on US Bureau of Labor Statistics for Diesel Technology.
- ALEKS score in math of 14 or higher and Writing Placement Exam score of 2 or higher or equivalent college placement exams.

The diesel program has limited space, and a waitlist is utilized if the program is full. Duration on the waitlist is one semester. If students do not move into program classes after one semester on the waitlist, they need to reschedule their consultation.

Upon completion of the Intermediate Technical Certificate, the student will possess skills in:

- Application of shop and industry safety procedures
- Develop a safety attitude, use and identify personal protective equipment, understand fire safety, and material handling
- Understand terminology; knowledge of tools and equipment; knowledge of CDL operation; use of scan tools and diagnostic tools
- Certification in forklift and crane operation
- Evaluation of diesel engine performance
- Engine identification and external component identification
- Familiar with Power Trains systems; able to disassemble and reassemble PowerShift transmissions, straight gear transmissions, drive lines, differentials, and clutches
- Able to troubleshoot and repair various engine systems such as engine brakes, emission controls, evolving hybrids, electrical, and multiplexing.
- Knowledge of theory and operation of various systems
- Learn the basic operation and function of air brakes, chassis, and suspension systems
- Understand hydraulic schematics; diagnosing and repairing hydraulic systems
- A/C systems students will receive MACS A/C Certification
- Knowledge of DOT compliance
- Obtain Commercial Driver's License Training (CDL)

Intermediate Technical Certificate Requirements

Code	Title	Credits
Social & Behavioral Ways of Knowing		
Take one of the following:		3.00
ANTH-102	CULTURAL ANTHROPOLOGY	
ANTH-120	WORLD PREHISTORY	
ANTH-170	INTRODUCTION TO NATIVE AMERICAN STUDIES	
ECON-201	PRINCIPLES OF MACROECONOMICS	
ECON-202	PRINCIPLES OF MICROECONOMICS	
GEOG-102	INTRODUCTION TO GEOGRAPHY	
HIST-101	WORLD HISTORY I	
HIST-102	WORLD HISTORY II	
HIST-111	UNITED STATES HISTORY I	

HIST-112	UNITED STATES HISTORY II	
HRPT-184	DIVERSITY IN ORGANIZATIONS	
HRPT-185	HUMAN RELATIONS IN ORGANIZATIONS	
POLS-101	AMERICAN NATIONAL GOVERNMENT	
POLS-237	INTERNATIONAL POLITICS	
POLS-285	COMPARATIVE GOVERNMENT	
PSYC-101	INTRODUCTION TO GENERAL PSYCHOLOGY	
PSYC-205	LIFESPAN DEVELOPMENTAL PSYCHOLOGY	
SOC-101	INTRODUCTION TO SOCIOLOGY	
SOC-102	SOCIAL PROBLEMS	
SS-184	DIVERSITY IN ORGANIZATIONS	
SS-185	HUMAN RELATIONS IN ORGANIZATIONS	
Technical Core		
GNBPT-103	APPLIED ALGEBRA	3.00
DSLTC-126	SAFETY	2.00
Program Requirements		
Select 24 credits from the following:		24.00
DSLTC-102	ELECTRICAL SYSTEMS	
DSLTC-105	DIESEL ENGINES	
DSLTC-200	SHOP SKILLS AND CLIMATE CONTROL	
DSLTC-210	HYDRAULICS	
DSLTC-220	DIESEL ENGINE FUEL SYSTEMS AND TUNE-UP	
DSLTC-230	POWER TRAINS	
DSLTC-240	CHASSIS, SUSPENSION AND AIRBRAKES	
DSLTC-103	POWER TRAINS LECTURE AND LAB	
Total Credits		**32.00**