Transportation, Distribution, and Logistics Career Cluster

The Transportation, Distribution, and Logistics Career Cluster focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

Diesel and Heavy Equipment *Statewide Program of Study*





The Diesel and Heavy Equipment program of study teaches students to diagnose, repair, modify, or redo mechanical and hydraulic equipment on crane, bulldozer, grader, conveyor, construction equipment, bus, and truck diesel engines.

Secondary Courses for High School Credit

Level 1

Principles of Transportation Systems

Level 2

- Introduction to Transportation Technology
- Diesel Equipment Technology I
- Occupational Safety and Environmental Technology I

Level 3

Diesel Equipment Technology II/Lab

Level 4

- Practicum in Transportation Systems
- Practicum in Entrepreneurship
- Career Preparation I

Postsecondary Opportunities

Associates Degrees

- Diesel Mechanics Technology/ Technician
- Heavy Equipment Maintenance Technology/ Technician



Work-Based Learning and Expanded Learning Opportunities

Exploration Activities Work-Based Learning Activities

- Participate in SkillsUSA
- Volunteer or work part time for an engine repair shop

Industry-Based Certifications

- ASE Entry Level Automobile Maintenance and Light Repair (MR)
- ASE Entry-Level Automobile Engine Performance (EP)
- ASE Entry-Level Automobile Engine Repair (ER)
- ASE Entry-Level Collision Non-Structural Analysis and Damage Repair (SR)
- ASE Entry-Level Collision Painting and Refinishing (PR)
- ASE Entry-Level Collision Structural Analysis and Damage Repair
- ASE Entry-Level Medium/Heavy Truck, Brakes (TB)
- ASE Entry-Level Medium/Heavy Truck, Diesel Engines (DE)
- ASE Entry-Level Medium/Heavy Truck, Electrical/Electronic Systems (TE)
- ASE Entry-Level Medium/Heavy Truck, Suspension and Steering (TS)
- ASE Refrigerant Recovery and Recycling
- Diesel Technology Job Ready
- Heavy Equipment Maintenance and Repair Job Ready
- ASE Engine Performance*
- ASE Engine Repair*
- ASE Maintenance Light Repair*
- ASE Non-Structural Analysis Damage Repair*
- ASE Painting & Refinishing*
- ASE Structural Analysis Damage Repair*
- ASE Truck Technician Brakes*
- ASE Truck Technician Diesel Engines*
- ASE Truck Technician Drive Trains*
- ASE Truck Technician Electronic Systems*
- ASE Truck Technician HVAC*
- ASE Truck Technician Suspension Steering*
- OSHA 30 Hour General*

*IBC sunsetting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Bus and Truck Mechanics and Diesel Engine Specialists	\$44,574	3,150	21%
Mobile Heavy Equipment Mechanics, Except Engines	\$47,299	1,627	16%



Diesel and Heavy Equipment Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Transportation Systems	13039250 (1 credit)	None	None

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Introduction to Transportation Technology	13039270 (.5 credit)	None	None
Diesel Equipment Technology I	13040150 (2 credits)	None	None
Occupational Safety and Environmental Technology I	N1303680 (1 credit)	None	None

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Diesel Equipment Technology II/Lab	13040160 (2 credits) 13040170 (3 credits)	Diesel Equipment Technology I	None

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Transportation Systems	13040450 (2 credits) 13040455 (3 credits) 13040460 (2 credits) 13040465 (3 credits)	None	None
Practicum in Entrepreneurship	N1303425 (2 credits)	None	None
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE TRANSPORTATION, DISTRIBUTION, AND LOGISTICS CAREER CLUSTER, PLEASE CONTACT: <u>CTE@tea.texas.gov</u> <u>https://tea.texas.gov/cte</u>

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