



Transportation, Distribution, and Logistics Career Cluster

The Transportation, Distribution, and Logistics career cluster focuses on planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes transportation infrastructure planning and management, logistics services, and mobile equipment and facility maintenance. This career cluster includes occupations ranging from automotive mechanic, avionics technician, and automotive entrepreneur to pilots and logistics planning professionals.

Statewide Program of Study: Diesel and Heavy Equipment Maintenance and Commercial Driver

The Diesel, Heavy Equipment Maintenance, and Commercial Drivers program of study focuses on occupational and educational opportunities associated with the function, operations, diagnosis, and service of diesel and heavy equipment systems. This program of study includes driving, inspecting, diagnosing, and repairing off-highway and on-highway vehicles and equipment.

Secondary Courses for High School Credit

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| Level 1 | <ul style="list-style-type: none"> Principles of Transportation Systems Introduction to Small Engine Technology |
| Level 2 | <ul style="list-style-type: none"> Introduction to Transportation Technology Occupational Safety and Environmental Technology I Diesel Equipment Technology I Entrepreneurship I |
| Level 3 | <ul style="list-style-type: none"> Diesel Equipment Technology II Diesel Equipment Technology II + Advanced Transportation Systems Laboratory Advanced Transportation Systems + Advanced Transportation Systems Laboratory (TBD) |
| Level 4 | <ul style="list-style-type: none"> Practicum in Transportation Systems Practicum in Transportation Systems + Extended Practicum in Transportation Systems Practicum in Entrepreneurship Practicum in Entrepreneurship + Extended Practicum in Entrepreneurship Career Preparation for Programs of Study Career Preparation for Programs of Study + Extended Career Preparation |



Example Postsecondary Opportunities

Apprenticeships

- Diesel Mechanic Apprentice

Associate Degrees

- Diesel Mechanics Technology
- Medium/Heavy Vehicle and Truck Technology

Bachelor's Degrees

- Electrical and Power Transmission Technology
- Construction/Heavy Equipment/Earthmoving Equipment Operation

Additional Stackable IBCs/License

- Electronic Diesel Engine Diagnosis Specialist Certification (L2)



Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Shadow a diesel mechanic at a transportation company and learn to inspect and repair diesel equipment
- Intern at a transportation company, working closely with an industrial mechanic to diagnose issues with heavy equipment

Expanded Learning Opportunities

- Tour an original equipment manufacturer (OEM) facility
- Participate in SkillsUSA

Aligned Industry-Based Certifications

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| <ul style="list-style-type: none"> 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 Automobile Heating and Air Conditioning (AC) 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) | <ul style="list-style-type: none"> 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 Commercial Drivers License (CDL) Diesel Technology - Job Ready Heavy Equipment Maintenance and Repair - Job Ready Industrial Technology Maintenance (ITM) - Basic Pneumatic Systems Industrial Technology Maintenance (ITM) - Electrical Systems Industrial Technology Maintenance (ITM) - Maintenance Operations |
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Example Aligned Occupations

Heavy and Tractor-Trailer Truck Drivers

Median Wage: \$50,174
Annual Openings: 30,182
10-Year Growth: 22%

Mobile Heavy Equipment Mechanics

Median Wage: \$60,005
Annual Openings: 2,315
10-Year Growth: 31%

First-Line Supervisors of Mechanics, Installers, and Repairers

Median Wage: \$70,554
Annual Openings: 6,556
10-Year Growth: 19%

Data Source: TexasWages, Texas Workforce Commission. Retrieved 3/8/2024.



For more information visit:
<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/tel-diesel-and-heavy-equipment-maintenance-and-commercial-drivers-extendedpptx.pdf>



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Course Information

Level 1

Course	Prerequisites Corequisites	Career Clusters
Principles of Transportation Systems* 13039250 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Introduction to Small Engine Technology 13040000 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

Level 2

Course	Prerequisites Corequisites	Career Clusters
Introduction to Transportation Technology* 13039270 (0.5 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Occupational Safety and Environmental Technology I* N1303680 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Transportation Systems, Principles of Distribution and Logistics, or Principles of Manufacturing Recommended Corequisites: None	
Diesel Equipment Technology I 13040150 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Entrepreneurship I* 13011101 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Business, Marketing, and Finance Recommended Corequisites: None	

Level 3

Course	Prerequisites Corequisites	Career Clusters
Diesel Equipment Technology II 13040160 (2 credits)	Prerequisites: Diesel Equipment Technology I Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

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* Indicates course is included in more than one program of study in this career cluster.

For additional information on the **Transportation, Distribution, and Logistics** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



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Level 3

Course	Prerequisites Corequisites	Career Clusters
Diesel Equipment Technology II + Advanced Transportation Systems Laboratory 13040170 (3 credits)	Prerequisites: Diesel Equipment Technology I Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Advanced Transportation Systems + Advanced Transportation Systems Laboratory* TBD (TBD credit)	Prerequisites: TBD Corequisites: TBD Recommended Prerequisites: TBD Recommended Corequisites: TBD	

Level 4

Course	Prerequisites Corequisites	Career Clusters
Practicum in Transportation Systems* First Time Taken: 13040450 (2 credits) Second Time Taken: 13040460 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Practicum in Transportation Systems + Extended Practicum in Transportation Systems* First Time Taken: 13040455 (3 credits) Second Time Taken: 13040465 (3 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Practicum in Entrepreneurship First Time Taken: 13011111 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Entrepreneurship I and II, or successful completion of at least two courses in a CTE program of study Recommended Corequisites: None	

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Level 4

Course	Prerequisites Corequisites	Career Clusters
Practicum in Entrepreneurship + Extended Practicum in Entrepreneurship* First Time Taken: 13011121 (3 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Entrepreneurship I and II, or successful completion of at least two courses in a CTE program of study Recommended Corequisites: None	
Career Preparation for Programs of Study* First Time Taken: 12701121 (2 credits)	Prerequisites: At least one Level 2 or higher CTE course Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Career Preparation for Programs of Study + Extended Career Preparation* First Time Taken: 12701141 (3 credits)	Prerequisites: : At least one Level 2 or higher CTE course Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

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