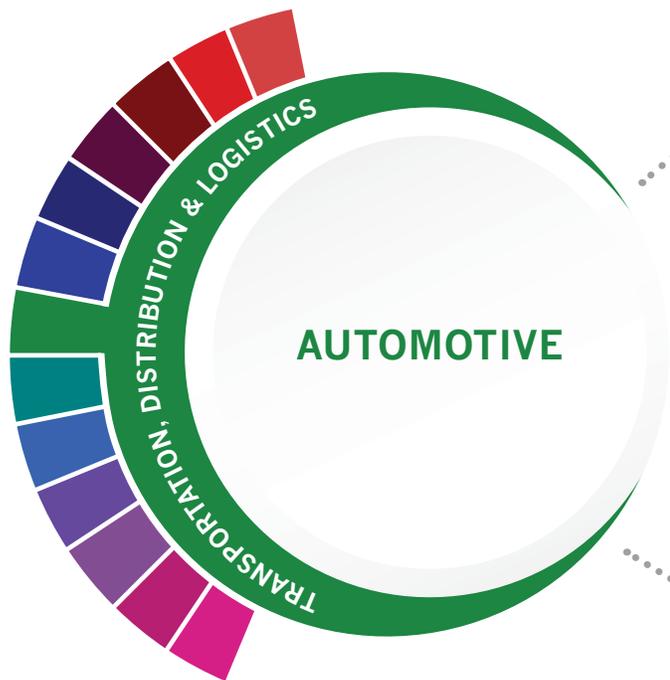


Local Implementation Considerations:

Students completing two or more courses for two or more credits within a program of study earn concentrator status for Perkins V federal accountability reporting.

Proposed Indicator: Students finishing three or more courses for four or more credits with one course from level 3 or 4 within a program of study earn completer status for federal accountability reporting.



COURSES

LEVEL 1

Principles of Transportation Systems
Small Engine Technology I
Basic Collision Repair and Refinishing

LEVEL 2

Automotive Basics
Introduction to Transportation Technology
Small Engine Technology II
Collision Repair/Lab
Occupational Safety and Environmental Technology I

LEVEL 3

Automotive Technology I
Energy and Power of Transportation Systems
Paint and Refinishing/Lab

LEVEL 4

Automotive Technology II/Lab
Practicum in Transportation Systems
Practicum in Entrepreneurship (TBD)
Career Preparation I

POSTSECONDARY OPTIONS

| HIGH SCHOOL/INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/DOCTORAL PROFESSIONAL DEGREE |
|--|--|---|-------------------|---------------------------------------|
| Automotive Service Excellence (ASE) Entry Level | Master Collision Repair and Refinishing Technician | Autobody/Collision and Repair Technology/Technician | | Mechanical Engineering |
| Automotive Service Excellence (ASE) Professional Level | Automobile Technician: various systems and parts | Medium/Heavy Vehicle and Truck Technology/Technician | | |
| | Engine Machinist Technician | Mechanical Engineering/Mechanical Technology/Technician | | |
| | Collision Repair and Refinish | | | |

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

| OCCUPATIONS | MEDIAN WAGE | ANNUAL OPENINGS | % GROWTH |
|---|-------------|-----------------|----------|
| Automotive Body and Related Repairers | \$40,144 | 1,456 | 25% |
| Automotive Service Technician and Mechanics | \$38,459 | 208 | 25% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
SkillsUSA competition
Automotive Service Association

Work Based Learning Activities:
Work at a local automotive repair or body shop.

The Automotive program of study teaches students how to repair and refinish automobiles and service various types of vehicles. Students may learn to collect payment for services or supplies and perform typical vehicle maintenance procedures such as lubrication, oil changes, installation of antifreeze, or replacement of accessories like wiper blades or tires.



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.

Successful completion of the Automotive program of study will fulfill requirements of the Business and Industry Endorsement.
Approved Statewide Program of Study - September 2019



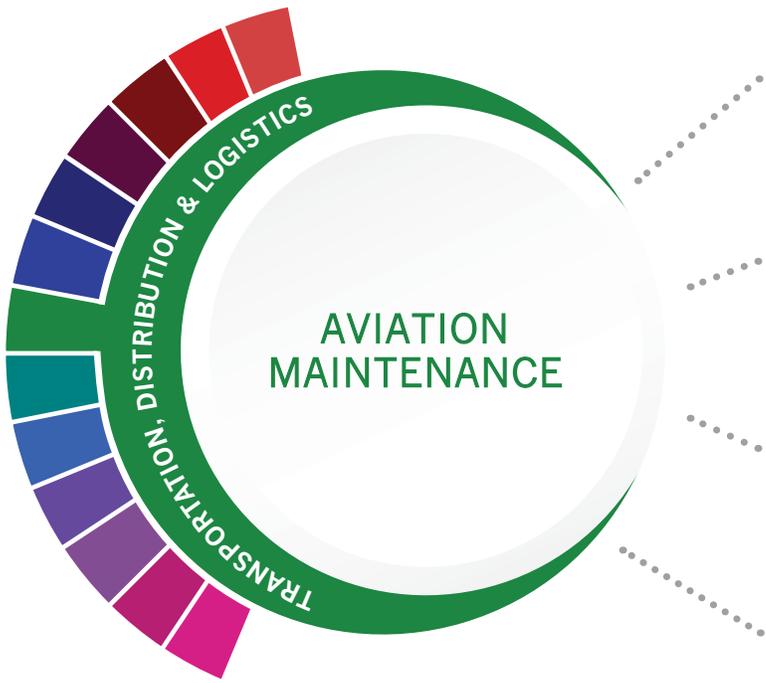
COURSE INFORMATION

| COURSE NAME | SERVICE ID | PREREQUISITES (PREQ) COREQUISITES (CREQ) | GRADE |
|---|--|---|-------|
| Principles of Transportation Systems | 13039250 (1 credit) | None | 9-12 |
| Small Engine Technology I | 13040000 (1 credit) | None | 9-12 |
| Basic Collision Repair and Refinishing | 13039750 (1 credit) | None | 9-12 |
| Automotive Basics | 13039550 (1 credit) | None | 9-12 |
| Introduction to Transportation Technology | 13039270 (.5 credit) | None | 9-10 |
| Small Engine Technology II | 13040100 (2 credits) | PREQ: Small Engine Technology I | 10-12 |
| Collision Repair/Lab | 13039800 (2 credits) 13039810 (3 credits) | None | 10-12 |
| Occupational Safety and Environmental Technology I | N1303680 (1 credit) | None | 9-12 |
| Automotive Technology I: Maintenance and Light Repair | 13039600 (2 credits) | None | 9-12 |
| Energy and Power of Transportation Systems | 13039300 (1 credit) | None | 10-12 |
| Paint and Refinishing/Lab | 13039900 (2 credits) 13039910 (3 credits) | None | 10-12 |
| Automotive Technology II/Lab | 13039700 (2 credits) 13039710 (3 credits) | PREQ: Automotive Technology I: Maintenance and Light Repair | 11-12 |
| Practicum in Transportation Systems | 13040450 (2 credits) 13040455 (3 credits) 13040460 (2 credits) 13040465 (3 credits) | None | 11-12 |
| Practicum in Entrepreneurship | TBD | TBD | TBD |
| Career Preparation I | 12701300 (2 credits) 12701305 (3 credits) | None | 11-12 |

FOR ADDITIONAL INFORMATION ON THE TRANSPORTATION, DISTRIBUTION, AND LOGISTICS CAREER CLUSTER, PLEASE CONTACT:

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<https://tea.texas.gov/cte>



COURSES

- LEVEL 1**
Introduction to Aircraft Technology

- LEVEL 2**
Occupational Safety and Environmental Technology I
Aviation Maintenance (TBD)

- LEVEL 3**
Aircraft Airframe Technology/Lab

- LEVEL 4**
Aircraft Powerplant Technology/Lab
Practicum in Transportation Systems
Career Preparation I

POSTSECONDARY OPTIONS

| HIGH SCHOOL/INDUSTRY CERTIFICATION | CERTIFICATE/LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/DOCTORAL PROFESSIONAL DEGREE |
|---------------------------------------|---|---|---|---------------------------------------|
| Aerospace Manufacturing Certification | Avionics Electronics Technician | Avionics Maintenance Technology/Technician | Airframe Mechanics and Aircraft Maintenance Technology/Technician | |
| | Aircraft Electronics Technician | Aircraft Powerplant Technology/Technician | | |
| | Aerospace/Aircraft Assembly Maintenance Certification | Airframe Mechanics and Aircraft Maintenance Technology/Technician | | |
| | | | | |

*Includes Level I and II Certificates

For more information on postsecondary options for this program of study, visit TXCTE.org.

| OCCUPATIONS | MEDIAN WAGE | ANNUAL OPENINGS | % GROWTH |
|------------------------------------|-------------|-----------------|----------|
| Aircraft Mechanics and Technicians | \$58,698 | 1,469 | 9% |
| Avionics Technicians | \$59,114 | 170 | 9% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Participate in SkillsUSA
Explore virtual aviation websites.

Work Based Learning Activities:
Seek part-time work at an airport, aviation services agency, or airline.

The Aviation Maintenance program of study introduces students to the occupations and education opportunities related to inspecting aircraft, maintenance procedures, air navigational aids, air traffic controls, and communications equipment to ensure conformance with federal safety regulations.



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.

Successful completion of the Aviation program of study will fulfill requirements of the Business and Industry Endorsement.
Approved Statewide Program of Study - September 2019



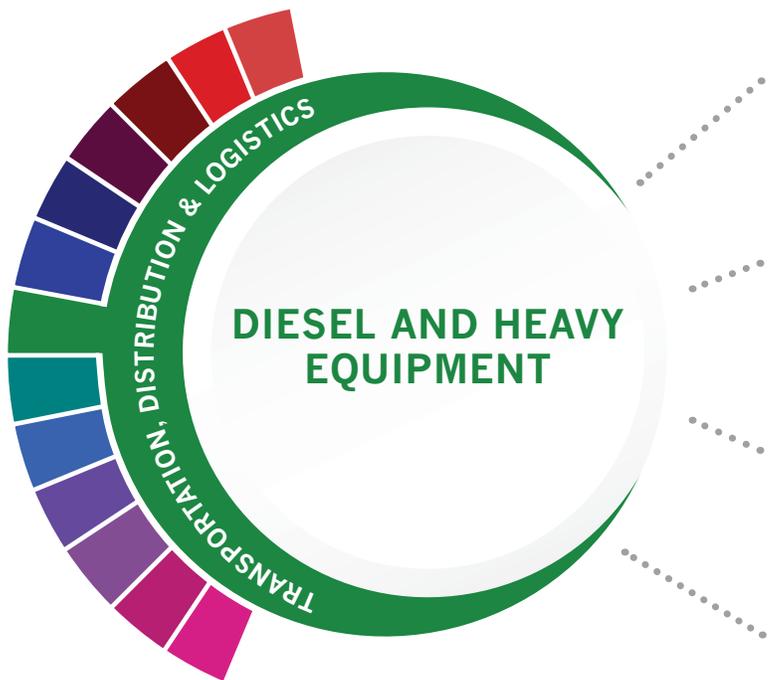
COURSE INFORMATION

| COURSE NAME | SERVICE ID | PREREQUISITES (PREQ) COREQUISITES (CREQ) | GRADE |
|--|--|---|-------|
| Introduction to Aircraft Technology | 13039350 (1 credit) | None | 9-12 |
| Occupational Safety and Environmental Technology I | N1303680 (1 credit) | None | 9-12 |
| Aviation Maintenance | TBD | TBD | TBD |
| Aircraft Airframe Technology/Lab | 13039400 (2 credits) 13039410 (3 credits) | PREQ: Introduction to Aircraft Technology | 10-12 |
| Aircraft Powerplant Technology/Lab | 13039500 (2 credits) 13039510 (3 credits) | PREQ: Introduction to Aircraft Technology | 11-12 |
| Practicum in Transportation Systems | 13040450 (2 credits) 13040455 (3 credits) 13040460 (2 credits) 13040465 (3 credits) | None | 11-12 |
| Career Preparation I | 12701300 (2 credits) 12701305 (3 credits) | None | 11-12 |
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FOR ADDITIONAL INFORMATION ON THE TRANSPORTATION, DISTRIBUTION,
AND LOGISTICS CAREER CLUSTER, PLEASE CONTACT:

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<https://tea.texas.gov/cte>



COURSES

- LEVEL 1**
Introduction to Transportation Technology
Principles of Transportation Systems

- LEVEL 2**
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 (TBD)
Career Preparation I

POSTSECONDARY OPTIONS

| HIGH SCHOOL/ INDUSTRY CERTIFICATION | CERTIFICATE/ LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/ DOCTORAL PROFESSIONAL DEGREE |
|---|-----------------------------------|---|----------------------|---|
| ASE Medium/ Heavy Truck Technician, Brakes (T4) | Engine Machinist Technician | Diesel Mechanics Technology/ Technician | | |
| ASE Medium/Heavy Truck Technician, Diesel Engines (T2) | Light Vehicle Diesel Engines | Medium/Heavy Vehicle and Truck Technology/ Technician | | |
| ASE Medium/Heavy Truck Technician, Drive Train (T3) - Professional | Transit Bus Technician | Heavy Equipment Maintenance Technology/ Technician | | |
| ASE Medium/ Heavy Truck Technician, Electrical/ Electronic Systems (T6) | Fluid Power Mechanic | | | |

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

| 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% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Participate in SkillsUSA

**Work Based Learning
Activities:**
Volunteer or work
part-time for a repair
shop that works on
engines

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.



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.

Successful completion of the Diesel and Heavy Equipment program of study will fulfill requirements of the Business and Industry Endorsement.
Approved Statewide Program of Study - September 2019



COURSE INFORMATION

| COURSE NAME | SERVICE ID | PREREQUISITES (PREQ) COREQUISITES (CREQ) | GRADE |
|--|--|---|-------|
| Introduction to Transportation Technology | 13039270 (.5 credit) | None | 9-10 |
| Principles of Transportation Systems | 13039250 (1 credit) | None | 9-12 |
| Diesel Equipment Technology I | 13040150 (2 credits) | None | 9-12 |
| Occupational and Safety Environmental Technology I | N1303680 (1 credit) | None | 9-12 |
| Practicum in Entrepreneurship | TBD | TBD | TBD |
| Diesel Equipment Technology II/Lab | 13040160 (2 credits) 13040170 (3 credits) | PREQ: Diesel Equipment Technology I | 10-12 |
| Practicum in Transportation Systems | 13040450 (2 credits) 13040455 (3 credits) 13040460 (2 credits) 13040465 (3 credits) | None | 11-12 |
| Career Preparation I | 12701300 (2 credits) 12701305 (3 credits) | None | 11-12 |
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**FOR ADDITIONAL INFORMATION ON THE TRANSPORTATION, DISTRIBUTION,
AND LOGISTICS CAREER CLUSTER, PLEASE CONTACT:**

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<https://tea.texas.gov/cte>



COURSES

- LEVEL 1**
Principles of Distribution and Logistics

- LEVEL 2**
Management of Transportation Systems
Concepts of Distribution and Logistics
Technology (TBD)
Occupational Safety and Environmental
Technology I

- LEVEL 3**
Distribution and Logistics
Raster-Based Geographic Information
Systems
Logistics Engineering (TBD)

- LEVEL 4**
Practicum in Distribution and Logistics
Practicum in Entrepreneurship (TBD)
Career Preparation I

POSTSECONDARY OPTIONS

| HIGH SCHOOL/ INDUSTRY CERTIFICATION | CERTIFICATE/ LICENSE* | ASSOCIATE'S DEGREE | BACHELOR'S DEGREE | MASTER'S/ DOCTORAL PROFESSIONAL DEGREE |
|---|--|--|----------------------------|---|
| MSSC Certified Logistics Technicians | Emergency Number Professional | Business Administration and Management, General | | |
| | SAP Certified Application Associate - Logistics Execution and Warehouse Management | Operations Management and Supervision | | |
| | Certified Billing and Coding Specialist | General Office Occupations and Clerical Services | Business/Commerce, General | Public Administration |
| | Cargo Shipper's Agent | Business Administration and Management, General | | |

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit TXCTE.org.

| OCCUPATIONS | MEDIAN WAGE | ANNUAL OPENINGS | % GROWTH |
|--|-------------|-----------------|----------|
| Logisticians | \$77,210 | 1,550 | 13% |
| Supply Chain Managers | \$113,110 | 1,794 | 26% |
| Transportation, Storage, and Distribution Managers | \$89,045 | 965 | 31% |
| Purchasing Managers | \$121,722 | 497 | 14% |
| Purchasing Agents, Except Wholesale, Retail, and Farm Products | \$64,293 | 2,727 | 9% |

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
SkillsUSA, FBA, FBLA, or
Technology Student
Association

Work Based Learning Activities:
Intern at a distribution or
warehousing center.

The Distribution and Logistics program of study teaches students how to plan, coordinate, and direct people and operational plans related to distributed goods and services. Students will learn how to manage daily operations and logistics personnel.



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.

Successful completion of the Distribution and Logistics program of study will fulfill requirements of the Business and Industry Endorsement.
Approved Statewide Program of Study - September 2019



COURSE INFORMATION

| COURSE NAME | SERVICE ID | PREREQUISITES (PREQ) COREQUISITES (CREQ) | GRADE |
|--|--|---|-------|
| Principles of Distribution and Logistics | 13039260 (1 credit) | None | 9-12 |
| Management of Transportation Systems | 13040200 (1 credit) | None | 10-12 |
| Concepts of Distributions and Logistics Technology (TBD) | TBD | TBD | TBD |
| Occupational Safety and Environmental Technology I | N1303680 (1 credit) | None | 9-12 |
| Distribution and Logistics | 13040300 (1 credit) | None | 11-12 |
| Raster-Based Geographic Information Systems | N1302806 (1 credit) | None | 10-12 |
| Logistics Engineering | TBD | TBD | TBD |
| Practicum in Distribution and Logistics | 13040470 (2 credits) 13040475 (3 credits) 13040480 (2 credits) 13040485 (3 credits) | None | 11-12 |
| Practicum in Entrepreneurship | TBD | TBD | TBD |
| Career Preparation I | 12701300 (2 credits) 12701305 (3 credits) | None | 11-12 |
| | | | |

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