



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, and mobile equipment and facility maintenance. This career cluster includes a diverse spectrum of occupations, ranging from automotive mechanic, avionics technician, automotive entrepreneur, pilots to logistics planning professionals.

Statewide Program of Study: Aviation Maintenance

The Aviation Maintenance program of study focuses on occupational and educational opportunities associated with maintenance and repair of airframe structures, systems, and components of an aircraft. This program of study includes exploration of aircraft maintenance procedures, air navigational aids, air traffic controls, and communication equipment to ensure compliance with federal safety regulations.

Secondary Courses for High School Credit

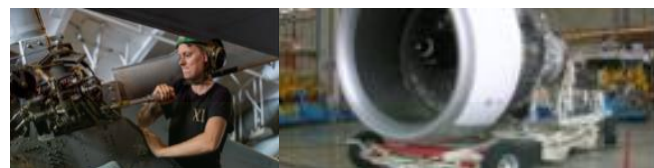
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| Level 1 | <ul style="list-style-type: none"> Principles of Transportation Systems Introduction to Aircraft Technology |
| Level 2 | <ul style="list-style-type: none"> Occupational Safety and Environmental Technology I Aircraft Maintenance Technology Aircraft Maintenance Technology + Advanced Transportation Systems Laboratory |
| Level 3 | <ul style="list-style-type: none"> Aircraft Airframe Technology Aircraft Airframe Technology + Advanced Transportation Systems Laboratory |
| Level 4 | <ul style="list-style-type: none"> Aircraft Powerplant Technology Aircraft Powerplant Technology + Advanced Transportation Systems Laboratory Practicum in Transportation Systems Practicum in Transportation Systems + Extended Practicum in Transportation Systems Career Preparation for Programs of Study Career Preparation for Programs of Study + Extended Career Preparation |

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	- Shadow an aviation maintenance technician at an airport to learn about aircraft inspection and maintenance - Participate in an aircraft maintenance apprenticeship at an airline or a defense technology company
Expanded Learning Opportunities	- Participate in TechForce - Participate in SkillsUSA - Explore associations such as Aircraft Mechanics Association and Women in Aviation

Aligned Industry-Based Certifications

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| <ul style="list-style-type: none"> Aerospace Manufacturing Certification Certificate of Aviation Maintenance Engineer (AME) Certificate of Aviation Maintenance Technician (AMT) FAA Aviation Mechanic-Airframe (AMT-A) FAA Aviation Mechanic-Power Plant (AMT-P) | <ul style="list-style-type: none"> Industrial Technology Maintenance (ITM) - Basic Mechanical Systems Industrial Technology Maintenance (ITM) - Basic Pneumatic Systems Industrial Technology Maintenance (ITM) - Electrical Systems Industrial Technology Maintenance (ITM) - Maintenance Operations |
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Example Postsecondary Opportunities

Apprenticeships

- Aircraft Mechanic Apprentice

Associate Degrees

- Avionics Maintenance Technology
- Aeronautics/Aviation/Aerospace Science and Technology

Bachelor's Degrees

- Aircraft Powerplant Technology
- Airframe Mechanics and Aircraft Maintenance Technology

Master's, Doctoral, and Professional Degrees

- Aerospace, Aeronautical, and Astronautical/Space Engineering
- Industrial Technology

Additional Stackable IBCs/License

- Certificated Aviation Maintenance Technician



Example Aligned Occupations

Aerospace Engineering and Operations Technologists

Median Wage: \$75,660
Annual Openings: 85
10-Year Growth: 21%

Aircraft Mechanics and Service Technicians

Median Wage: \$77,643
Annual Openings: 1,561
10-Year Growth: 16%

Avionics Technicians

Median Wage: \$78,639
Annual Openings: 128
10-Year Growth: 16%

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/tcl-aviation-maintenance-extendedpptx.pdf>



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Statewide Program of Study: Aviation Maintenance

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 Aircraft Technology* 13039350 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

Level 2

Course	Prerequisites Corequisites	Career Clusters
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	
Aircraft Maintenance Technology 13039360 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Introduction to Aircraft Technology Recommended Corequisites: None	
Aircraft Maintenance Technology + Advanced Transportation Systems Laboratory 13039370 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Introduction to Aircraft Technology Recommended Corequisites: None	

Level 3

Course	Prerequisites Corequisites	Career Clusters
Aircraft Airframe Technology 13039400 (2 credits)	Prerequisites: Aircraft Maintenance Technology Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Aircraft Airframe Technology + Advanced Transportation Systems Laboratory 13039410 (3 credits)	Prerequisites: Aircraft Maintenance Technology Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

* 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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Statewide Program of Study: Aviation Maintenance

Course Information

Level 4

Course	Prerequisites Corequisites	Career Clusters
Aircraft Powerplant Technology 13039500 (2 credits)	Prerequisites: Aircraft Maintenance Technology Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Aircraft Powerplant Technology + Advanced Transportation Systems Laboratory 13039510 (3 credits)	Prerequisites: Aircraft Maintenance Technology Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
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	
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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