

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 Pilots

The Pilots and Aviation Operations program of study focuses on occupational and educational opportunities associated with the principles and science of flight. This program of study includes the exploration and understanding of aviation engineering, air navigational aids, air traffic controls, and communications equipment to ensure conformance with federal safety regulations.



Secondary Courses for High School Credit

Level 1	•	Principles of	Transportation	Systems
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- Introduction to Aircraft Technology
- Introduction to Aerospace and Aviation

Level 3 • Aviation Ground School

- Aerospace Engineering (PLTW)
- · Instructor Ground School (TBD)

Level 4 • P

- 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
- Scientific Research and Design



AP or IB

AP Calculus BC AP Physics C: Mechanics

Dual Credit

Dual credit offerings will vary by local education agency.

Students should be advised to consider these course opportunities to enrich their preparation. AP or IB courses not listed under the Secondary Courses for High School Credit section of this framework document do not count towards concentrator/completer status for this program of study.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning	
Activities	

- Shadow a commercial airline pilot for to learn about pre- and post-flight routines
- Intern at a technology company that produces drones to learn about aerial robotics and drone pilot requirements

Expanded Learning Opportunities

- Explore virtual aviation websites
- Participate in SkillsUSA

Aligned Industry-Based Certifications

• FAA Part 107 Remote Drone Pilot





Example Postsecondary Opportunities

Apprenticeships

· Air Transport Pilot Apprentice

Associate Degrees

Airline/Commercial/Professional Pilot and Flight Crew

Bachelor's Degrees

Airline/Commercial/Professional Pilot and Flight Crew

Additional Stackable IBCs/License

· Airman Certificate



Example Aligned Occupations

Commercial Pilots

Median Wage: \$108,120 Annual Openings: 663 10-Year Growth: 20%

Airline Pilots, Copilots, and Flight Engineers

Median Wage: \$180,060 Annual Openings: 1,204 10-Year Growth: 14%

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





Transportation, Distribution, and Logistics Career Cluster Statewide Program of Study: Aviation Pilots

Course Information

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	Á
Introduction to Aerospace and Aviation N1304672 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

Course	Prerequisites Corequisites	Career Clusters
Introduction to Unmanned Aerial Vehicles (UAV) N1304670 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Transportation Systems Recommended Corequisites: None	

Course	Prerequisites Corequisites	Career Clusters
Aviation Ground School N1304675 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Algebra I, Introduction to Unmanned Aerial Vehicles, Introduction to Aircraft Technology, or Junior Reserve Officer Training Corps (ROTC) II Recommended Corequisites: None	
Aerospace Engineering (PLTW) N1303745 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: At least one credit in a Level 2 or higher course in engineering Recommended Corequisites: None	
Instructor Ground School TBD (TBD credit)	Prerequisites: TBD Corequisites: TBD Recommended Prerequisites: TBD Recommended Corequisites: TBD	

^{*} Indicates course is included in more than one program of study.





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Course Information

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	
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	
Scientific Research and Design 13037200 (1 credit)	Prerequisites: Biology, Chemistry, Integrated Physics and Chemistry (IPC), or Physics Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

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