

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.

Regional Program of Study: Maritime Approved in ESC Regions 2, 4, and 5

*The list of approved ESC regions is updated every school year, be sure to check the CTE regional program of study website for updates.

The Maritime regional program of study focuses on educational and occupational opportunities associated with the operation of water vessels. This program of study includes maintenance procedures and operation of maritime navigational aids, maritime traffic controls, and communications equipment to ensure conformance with federal safety regulations.



Secondary Courses for High School Credit

Level 1 • Principles of Maritime Science

- Principles of Transportation Systems
- · Principles of Distribution and Logistics
- Level 2 Introduction to Shipboard Engineering
 - Maritime Science I
 - Occupational Safety and Environmental Technology I
- **Level 3** Maritime Science II
 - Advanced Shipboard Engineering
- Level 4 Practicum in Transportation Systems
 - Practicum in Transportation Systems + Extended Practicum in Transportation Systems
 - Practicum in Distribution and Logistics
 - Practicum in Distribution and Logistics + Extended Practicum in Distribution and Logistics
 - · 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 at a maritime port to learn about maritime traffic control
- Participate in a pre-apprenticeship with a government agency (such as U.S. Coast Guard) working closely with ship engineers

Expanded Learning Opportunities

- Participate in SkillsUSA
- Tour various maritime vessels

Aligned Industry-Based Certifications

- Certified Logistics Technician (CLT)
- Logistics & Transportation Operations Strategies (LTOS)



Example Postsecondary Opportunities

Apprenticeships

Maritime Apprenticeship Program (MAP)



Associate Degrees

- Logistics
- Transportation and Mobility Management

Bachelor's Degrees

- Logistics and Supply Chain Management
- · Maritime Transportation

Master's, Doctoral, and Professional Degrees

- Logistics
- · Transportation and Mobility Management

Additional Stackable IBCs/License

• Limited Tonnage Workboat Mate



Example Aligned Occupations

Captains, Mates, and Pilots of Water Vessels

Median Wage: \$116,959 Annual Openings: 311 10-Year Growth: 13%

Ship Engineers

Median Wage: \$118,493 Annual Openings: 53 10-Year Growth: 7%

Motorboat Operators

Median Wage: \$44,509 Annual Openings: 20 10-Year Growth: 14%

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





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Regional Program of Study: Maritime

Course Information

Course	Prerequisites Corequisites	Career Clusters
Principles of Maritime Science N1304661 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Principles of Transportation Systems* 13039250 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Principles of Distribution and Logistics* 13039260 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

Course	Prerequisites Corequisites	Career Clusters
Introduction to Shipboard Engineering N1304666 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Maritime Science Recommended Corequisites: None	
Maritime Science I N1304662 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Maritime Science 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	

Course	Prerequisites Corequisites	Career Clusters
Maritime Science II N1304663 (1 credit)	Prerequisites: Maritime Science I Corequisites: None Recommended Prerequisites: Principles of Maritime Science Recommended Corequisites: None	á
Advanced Shipboard Engineering N1304667 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Introduction to Shipboard Engineering Recommended Corequisites: None	

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





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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	
Practicum in Distribution and Logistics* First Time Taken: 13040470 (2 credits) Second Time Taken: 13040480 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Practicum in Distribution and Logistics + Extended Practicum in Distribution and Logistics* First Time Taken: 13040475 (3 credits) Second Time Taken: 13040485 (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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