



CTE Programs of Study

2025-2026 School Year

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Programs of study are course sequences that prepare students with the knowledge and skills necessary for success in their chosen career. All programs of study include a variety of occupations that require different levels of education and training. Selecting a program of study provides you with an area of focus, along with flexibility and a variety of ideas to pursue.

Deciding on a program of study can help you prepare for your future. The intent is not for you to decide on a specific occupation for the rest of your life but to select an area into which you can begin directing your energies. Identifying a program of study can help you in selecting school courses, activities, and part-time employment. It can also help guide your participation in workplace readiness programs like school-to-work, internship, or cooperative education.

A program of study choice is not a permanent commitment. As you have new experiences, you will learn new things about yourself and may change it. If you decide on a new program of study, you should discuss it with your counselor and adjust your future course selections in accordance with your new career direction.

Students will be asked to choose a program of study from the fourteen career clusters identified by the Texas Education Agency. These programs of study are broad areas of study which are flexible, overlapping in nature, and allow students to change as new knowledge and experiences are acquired. Programs of study are open, rather than narrow, allowing the student more options while providing a focus and relevance to education.

Using the student's career interests and aptitude information, the counselor and student will develop a graduation plan in one of the following programs of study. For complete information, see <https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/approved-cte-programs-study>.

Texas City ISD CTE Programs of Study

Industrial Trades Center

Program	Endorsement	Level 1	Level 2	Level 3	Level 4
Carpentry	Business and Industry	Principles of Construction 7841	Construction Technology I 7866	Construction Technology II 7867	Practicum in Construction Technology 7846
Electrical & Instrumentation	Business and Industry	Principles of Construction 7842	Electrical Technology I 7771 and Occupational Safety and Evni. Tech. I 7868	Electrical Technology II 7844	Practicum in Construction Technology 7847
Fire Science	Public Services	Principles of Law and Public Safety (Fire Academy) 7900	Medical Terminology (Fire Academy-Dual Credit) 7901	Firefighter I (Dual Credit) 7902	Firefighter II (Dual Credit) 7903 *New for the 2026-2027 school year
Maritime	Business and Industry	Principles of Maritime 7783	Maritime Science I 7784 and Introduction to Shipboard Engineering 7861	Maritime Science II 7884 and Advanced Shipboard Engineering 7862	Practicum in Distribution and Logistics 7885
Pipefitting	Business and Industry	Principles of Construction 7865	Pipefitting Technology I/Lab 7874	Pipefitting Technology II/Lab 7875	Practicum in Construction Technology 7848
Welding	Business and Industry	BIM I 7767	Intro to Welding 7813	Welding I 7785	Welding II 7799

La Marque High School

Program	Endorsement	Level 1	Level 2	Level 3	Level 4
Animal Science	Business and Industry	Principles of AFNR 7710	Equine Science 7832 /Small Animal Mngmt. 7722	Advanced Animal Science 7734	Practicum in AFNR 7754 *New for 26-27 School Year
Architectural Design	Business and Industry	Principles of Architecture 7840	Architectural Design I 7743	Architectural Design II 7744	Practicum in Architectural Design 7748
Barbering	Public Services	BIM I 7767	Intro to Barbering 7886	Barbering I 7887	Barbering II 7888
Business Management	Business and Industry	BIM I 7767	BIM II 7768	Career Preparation I (2 Credit) 7729	Career Preparation II (3 Credit) 7816
Cosmetology	Public Services	BIM I 7767	Intro to Cosmetology 7780	Cosmetology I/Lab 7781	Cosmetology II/Lab 7782
Culinary Arts	Business and Industry	BIM I 7767	Culinary Arts 7713	Advanced Culinary Arts 7717	Practicum in Culinary Arts 7810
Digital Communications (E-Sports)	Business and Industry	Principles of A/V 7755	Audio/Video Production I 7756	Audio/Video Production II/Lab 7853 *New for 26-27 School Year	Practicum in A/V 7758 *New for 27-28 School Year
Healthcare Therapeutic (EMT)	Public Services	Principles of Health Science 7735	Medical Terminology 7745	Health Science Theory/Clinical 7830	Practicum in Health Science 7738
Healthcare Therapeutic (Nursing)	Public Services	Principles of Health Science 7735	Medical Terminology 7745	Health Science Theory/Clinical 7830	Practicum in Health Science 7737
Law Enforcement	Public Services	Principles of Law and Public Safety 7834	Law Enforcement I 7835	Law Enforcement II 7836	Practicum in Law and Public Safety 7837
Robotics and Engineering	Engineering	Principles of Applied Engineering 7823	Engineering Design and Presentation I 7824	Robotics I 7820 and Robotics II 7821	Practicum in STEM 7819
Teaching and Training	Public Services	Principles in Education and Training 7700	Child Development 7912	Instructional Practices 7702 / (Dual Credit) 7910	Practicum in Education and Training 7707 / (Dual Credit) 7911

Texas City High School

Program	Endorsement	Level 1	Level 2	Level 3	Level 4
Animal Science (Vet Med)	Business and Industry	Principles of AFNR 7710	Equine Science 7832 /Small Animal Mngmt. 7722	Advanced Animal Science (Vet Med I) 7734	Practicum in AFNR (Vet Med II) 7754
Business Management	Business and Industry	BIM I 7767	BIM II 7768	Career Preparation I (2 Credit) 7729	Career Preparation II (3 Credit) 7816
Cosmetology	Public Services	BIM I 7767	Intro to Cosmetology 7780	Cosmetology I/Lab 7781	Cosmetology II/Lab 7782
Culinary Arts	Business and Industry	BIM I 7767	Culinary Arts 7713	Advanced Culinary Arts 7717	Practicum in Culinary Arts 7810
Digital Communications (E-Sports)	Business and Industry	Principles of A/V 7755	Audio/Video Production I 7756	Audio/Video Production II/Lab 7853	Practicum in A/V 7758
Healthcare Therapeutic (Dentistry)	Public Services	Principles of Health Science 7735	Medical Terminology 7745	Health Science Theory 7829	Practicum in Health Science 7739
Healthcare Therapeutic (EMT)	Public Services	Principles of Health Science 7735	Medical Terminology 7745	Health Science Theory/Clinical 7830	Practicum in Health Science 7738
Healthcare Therapeutic (Nursing)	Public Services	Principles of Health Science 7735	Medical Terminology 7745	Health Science Theory/Clinical 7830	Practicum in Health Science 7737
Healthcare Therapeutic (Pharmacology)	Public Services	Principles of Health Science 7735	Medical Terminology 7745	Health Science Theory 7829	Practicum in Health Science 7833
Hospitality and Tourism	Business and Industry	Principles of Hospitality 7800	Hotel Management 7811	Hospitality Services 7701	Practicum in Hospitality Services 7705
Law Enforcement	Public Services	Principles of Law and Public Safety 7834	Law Enforcement I 7835	Law Enforcement II 7836	Practicum in Law and Public Safety 7837
Marketing	Business and Industry	Principles of BMF 7764	Social Media Marketing 7765 /Virtual Business 7766	Advanced Marketing 7856	Practicum in Marketing 7857
Networking Systems	Information Technology	Principles of Information Technology 7916	Computer Maintenance 7917 *New for 26-27 School Year	Networking 7918 *New for 27-28 School Year	Practicum in Information Technology 7919 *New for 28-29 School Year
Plant Science	Business and Industry	Principles of AFNR 7710	Floral Design 7711	Horticulture 7750	Adv. Plant and Soil Science 7812
Robotics and Engineering	Engineering	Principles of Applied Engineering 7823	Engineering Design and Presentation I 7824	Robotics I 7820 and Robotics II 7821	Practicum in STEM 7819
Teaching and Training	Public Services	Principles in Education and Training 7700	Child Development 7912	Instructional Practices 7702 / (Dual Credit) 7910	Practicum in Education and Training 7707 / (Dual Credit) 7911



Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

Statewide Program of Study: *Animal Science*

The Animal Science program of study focuses on occupational and educational opportunities associated with the science, research, and business of animals and other living organisms. This program of study includes applying biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students will research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.

Offered to: LMHS



Secondary Courses for High School Credit

- | | |
|----------------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Agriculture, Food, and Natural Resources |
| Level 2 | <ul style="list-style-type: none"> Small Animal Management Equine Science |
| Level 3 | <ul style="list-style-type: none"> Advanced Animal Science |
| Level 4 | <ul style="list-style-type: none"> Practicum in Agriculture, Food, and Natural Resources |

Aligned Advanced Academic Courses

Dual Credit	Dual credit offerings will vary by local education agency.
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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 an animal scientist in a biology lab to learn about applying science to understand animals and wildlife
- Intern in a veterinary clinic, caring for animals and wildlife being treated in the clinic

Expanded Learning Opportunities

- Participate in an FFA career, leadership, and speaking contest like an agriscience fair
- Attend an agricultural industry seminar

Aligned Industry-Based Certifications

- Elanco Fundamentals of Animal Science



Example Postsecondary Opportunities

Apprenticeships

- Reproduction Technician

Associate Degrees

- Biological and Physical Sciences
- Entomology

Bachelor's Degrees

- Animal Science
- Zoology/Animal Biology

Master's, Doctoral, and Professional Degrees

- Marine Sciences
- Biotechnology

Additional Stackable IBCs/License

- Veterinarian
- Certified Veterinary Technician



Example Aligned Occupations

Veterinary Assistants and Laboratory Animal Caretakers

Median Wage: \$29,906
Annual Openings: 1,348
10-Year Growth: 24%

Veterinary Technologists and Technicians

Median Wage: \$33,679
Annual Openings: 1,217
10-Year Growth: 24%

Veterinarian

Median Wage: \$103,160
Annual Openings: 347
10-Year Growth: 26%

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/programs-of-study-additional-resources>



Agriculture, Food, and Natural Resources Career Cluster

Statewide Program of Study: *Animal Science*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Agriculture, Food, and Natural Resources 13000200 (1 credit)	Prerequisites: None Corequisites: None	7710

This course will prepare students for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

Level 2

Course	Prerequisites Corequisites	Local Course #
Equine Science 13000500 (0.5 credit)	Prerequisites: Principles of AFNR Corequisites: Small Animal Management *Fall Semester	7832

In Equine Science, students will acquire knowledge and skills related to equine animal systems and the equine industry. Equine Science may address topics related to horses, donkeys, and mules. To prepare for careers in the field of animal science, students must enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Small Animal Management 13000400 (0.5 credit)	Prerequisites: Principles of AFNR Corequisites: Equine Science *Spring Semester	7722
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This course will prepare students for careers in the field of animal science, students need to enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. Suggested small

Level 3

Course	Prerequisites Corequisites	Local Course #
Advanced Animal Science 13000700 (1 credit)	Prerequisites: Small Animal Management, Equine Science	7734

To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings. Topics covered in this course include, but are not limited to, veterinary practices as they relate to both large and small animal species.

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Agriculture, Food, and Natural Resources 13002500 (2 credits)	Prerequisites: Advanced Animal Science *New for LMHS 2026-2027	7754

The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources cluster. The practicum is designed to give students supervised practical application of knowledge and skills.

For additional information on the **Agriculture, Food, and Natural Resources** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

Statewide Program of Study: **Veterinary Medicine**

The Animal Science program of study focuses on occupational and educational opportunities associated with the science, research, and business of animals and other living organisms. This program of study includes applying biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students will research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.

Offered to: TCHS



Secondary Courses for High School Credit

- | | |
|----------------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Agriculture, Food, and Natural Resources |
| Level 2 | <ul style="list-style-type: none"> Small Animal Management Equine Science |
| Level 3 | <ul style="list-style-type: none"> Advanced Animal Science |
| Level 4 | <ul style="list-style-type: none"> Practicum in Agriculture, Food, and Natural Resources |

Aligned Advanced Academic Courses

Dual Credit	Dual credit offerings will vary by local education agency.
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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 an animal scientist in a biology lab to learn about applying science to understand animals and wildlife
- Intern in a veterinary clinic, caring for animals and wildlife being treated in the clinic

Expanded Learning Opportunities

- Participate in an FFA career, leadership, and speaking contest like an agriscience fair
- Attend an agricultural industry seminar

Aligned Industry-Based Certifications

- Certified Veterinary Assistant Level I
- Elanco Veterinary Medical Applications



Example Postsecondary Opportunities

Apprenticeships

- Reproduction Technician

Associate Degrees

- Biological and Physical Sciences
- Entomology

Bachelor's Degrees

- Animal Science
- Zoology/Animal Biology

Master's, Doctoral, and Professional Degrees

- Marine Sciences
- Biotechnology

Additional Stackable IBCs/License

- Veterinarian
- Certified Veterinary Technician



Example Aligned Occupations

Veterinary Assistants and Laboratory Animal Caretakers

Median Wage: \$29,906
Annual Openings: 1,348
10-Year Growth: 24%

Veterinary Technologists and Technicians

Median Wage: \$33,679
Annual Openings: 1,217
10-Year Growth: 24%

Veterinarian

Median Wage: \$103,160
Annual Openings: 347
10-Year Growth: 26%

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/programs-of-study-additional-resources>



Agriculture, Food, and Natural Resources Career Cluster

Statewide Program of Study: *Veterinary Medicine*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Agriculture, Food, and Natural Resources 13000200 (1 credit)	Prerequisites: None Corequisites: None	7710

This course will prepare students for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

Level 2

Course	Prerequisites Corequisites	Local Course #
Equine Science 13000500 (0.5 credit)	Prerequisites: Principles of AFNR Corequisites: Small Animal Management *Fall Semester	7832

In Equine Science, students will acquire knowledge and skills related to equine animal systems and the equine industry. Equine Science may address topics related to horses, donkeys, and mules. To prepare for careers in the field of animal science, students must enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.

Small Animal Management 13000400 (0.5 credit)	Prerequisites: Principles of AFNR Corequisites: Equine Science *Spring Semester	7722
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This course will prepare students for careers in the field of animal science, students need to enhance academic knowledge and skills, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills in a variety of settings. Suggested small

Level 3

Course	Prerequisites Corequisites	Local Course #
Advanced Animal Science (Vet Med I) 13000700 (1 credit)	Prerequisites: Small Animal Management, Equine Science	7734

To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire technical knowledge and skills related to animal systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer knowledge and skills and technologies in a variety of settings. Topics covered in this course include, but are not limited to, veterinary practices as they relate to both large and small animal species.

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Agriculture, Food, and Natural Resources (Vet Med II) 13002500 (2 credits)	Prerequisites: Advanced Animal Science (Vet Med I)	7754

The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources cluster. The practicum is designed to give students supervised practical application of knowledge and skills. TCHS students must obtain an internship at an approved Veterinary Clinic for 300 hours.

For additional information on the **Agriculture, Food, and Natural Resources** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

Statewide Program of Study: *Plant Science*

The Plant Science program of study focuses on occupational and educational opportunities associated with the science, research, and business of plants and other living organisms. This program of study includes the application of biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.

Offered to: TCHS

Secondary Courses for High School Credit

- | | |
|----------------|--|
| Level 1 | • Principles of Agriculture, Food, and Natural Resources |
| Level 2 | • Floral Design |
| Level 3 | • Horticultural Science |
| Level 4 | • Advanced Plant and Soil Science |

Aligned Advanced Academic Courses

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

- Work in a part-time job at a landscaping company to learn about production and management of plants.
- Intern at an agricultural research company, working alongside a biological technician to learn about application of biology to plant production

Expanded Learning Opportunities

- Participate in an FFA career, leadership, and speaking contest like an agriscience fair
- Participate in an industry-related competition like an agriscience fair

Aligned Industry-Based Certifications

- BASF Plant Science Certification
- Texas State Florists' Association Knowledge Based Floral Certification



Example Postsecondary Opportunities

Apprenticeships

- Horticulturist

Associate Degrees

- Biology/Biological Sciences
- Biological and Physical Sciences

Bachelor's Degrees

- Horticulture
- Plant Pathology/Phytopathology

Master's, Doctoral, and Professional Degrees

- Plant Breeding
- Botany/Plant Biology

Additional Stackable IBCs/License

- Nursery Floral License
- Horticulturist Certification



Example Aligned Occupations

Pesticide Handlers, Sprayers, and Applicators, Vegetation

Median Wage: \$46,153

Annual Openings: 205

10-Year Growth: 17%

Biological Technicians

Median Wage: \$45,787

Annual Openings: 879

10-Year Growth: 14%

Farmers, Ranchers, and Other Agricultural Managers

Median Wage: \$65,490

Annual Openings: 28,020

10-Year Growth: 4%

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/programs-of-study-additional-resources>



Agriculture, Food, and Natural Resources Career Cluster

Statewide Program of Study: *Plant Science*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
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Principles of Agriculture, Food, and Natural Resources
13000200 (1 credit)

Prerequisites: None
Corequisites: None

7710

This course will prepare students for careers in agriculture, food, and natural resources, students must attain academic skills and knowledge in agriculture. This course allows students to develop knowledge and skills regarding career opportunities, personal development, globalization, industry standards, details, practices, and expectations. To prepare for success, students need to have opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

Level 2

Course	Prerequisites Corequisites	Local Course #
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Floral Design
13001800 (1 credit)

Prerequisites: Principles of AFNR
Corequisites: None

7711

Students will design and arrange flowers, foliage, and related plant materials for interior locations. Included will be the opportunity to make football mums, dance corsages, and flower arrangements. To examine floral design in relation to contemporary designs, business practices, specialty items, creativity, and careers in the floral industry. Floral Design also counts for Fine Arts Credit.

Level 3

Course	Prerequisites Corequisites	Local Course #
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Horticultural Science
13002000 (1 credit)

Prerequisites: Floral Design
Corequisites: None

7750

Horticulture Science is designed to build upon the fundamentals of floral design and develop an understanding of common horticultural management practices as they relate to food and ornamental plant production.

Level 4

Course	Prerequisites Corequisites	Local Course #
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Advanced Plant and Soil Science
13002100 (1 credit)

Prerequisites: Horticulture Science and One credit in Science
Corequisites: None

7812

Advanced Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science. To prepare for careers in plant and soil science, students must attain academic skills and knowledge, acquire technical knowledge and skills related to plant and soil science and the workplace. This course will satisfy the 3rd or 4th Science graduation requirement.

For additional information on the **Agriculture, Food, and Natural Resources** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Architecture and Construction Career Cluster

The Architecture and Construction career cluster focuses on designing, planning, managing, building, and maintaining the built environment. This career cluster includes occupations ranging from architect, carpenter, and construction manager to electrician, plumber and heating, air conditioning, and refrigeration technician.

Statewide Program of Study: *Architectural Design*

The Architectural Drafting and Design program of study focuses on occupational and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study includes reading, interpreting, and drawing blueprints for interior and exterior construction projects.

Offered to: LMHS

Secondary Courses for High School Credit

- | | |
|----------------|-------------------------------------|
| Level 1 | • Principles of Architecture |
| Level 2 | • Architectural Design I |
| Level 3 | • Architectural Design II |
| Level 4 | • Practicum in Architectural Design |

Aligned Advanced Academic Courses

Dual Credit	Dual credit offerings will vary by local education agency.
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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

- Intern at an architectural firm to develop CADD drafting and design technology skills
- Shadow a civil engineer to learn more about their day-to-day responsibilities

Expanded Learning Opportunities

- Conduct an informational interview with an architect to learn about their role and responsibilities
- Participate in SkillsUSA or TSA

Aligned Industry-Based Certifications

- Autodesk Associate (Certified User) AutoCAD



Example Postsecondary Opportunities

Apprenticeships

- Drafter

Associate Degrees

- CAD/CADD Drafting and/or Design Technology
- Drafting and Design Technology
- Surveying Technology/Surveying
- Architectural Drafting and Architectural CAD/CADD

Bachelor's Degrees

- Civil Engineering
- Construction Engineering
- Surveying Engineering
- Drafting and Design Technology

Master's, Doctoral, and Professional Degrees

- Civil Engineering
- Geographic Information Science and Cartography
- Construction Engineering Technology



Example Aligned Occupations

Architectural and Civil Drafters

Median Wage: \$57,424
Annual Openings: 1,366
10-Year Growth: 15%

Architects

Median Wage: \$80,903
Annual Openings: 966
10-Year Growth: 18%

Construction Managers

Median Wage: \$95,072
Annual Openings: 6,325
10-Year Growth: 24%

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/programs-of-study-additional-resources>



Architecture and Construction Career Cluster

Statewide Program of Study: *Architectural Design*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Architecture 13004210 (1 credit)	Prerequisites: None Corequisites: None	7840
<p>Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management. Achieving proficiency in decision making and problem solving is an essential skill for career planning and lifelong learning. Students use self-knowledge, education, and career information to set and achieve realistic career and educational goals. Job-specific training can be provided through training modules that identify career goals in trade and industry areas. Classroom studies include topics such as safety, work ethics, communication, information technology applications, systems, health, environment, leadership, teamwork, ethical and legal responsibility, employability, and career development and include skills such as problem solving, critical thinking, and reading technical drawings.</p>		

Level 2

Course	Prerequisites Corequisites	Local Course #
Architectural Design I 13004600 (1 credit)	Prerequisites: Principles of Architecture, Algebra I and English I Corequisites: None	7743
<p>In Architectural Design I, students will gain knowledge and skills needed to enter a career in architecture or construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design I include the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for nonresidential or residential architectural purposes.</p>		

Level 3

Course	Prerequisites Corequisites	Local Course #
Architectural Design II 13004700 (2 credits)	Prerequisites: Architectural Design I Corequisites: None	7744
<p>In Architectural Design II, students will gain advanced knowledge and skills needed to enter a career in architecture or construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design II includes the advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for nonresidential or residential architectural purposes.</p>		

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Architectural Design 13004800 (2 credits)	Prerequisites: Architectural Design II Corequisites: None	7748
<p>Practicum in Architectural Design is an occupationally specific course designed to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study.</p>		

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

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Architecture and Construction Career Cluster

The Architecture and Construction career cluster focuses on designing, planning, managing, building, and maintaining the built environment. This career cluster includes occupations ranging from architect, carpenter, and construction manager to electrician, plumber, and heating, air conditioning, and refrigeration technician.

Statewide Program of Study: Carpentry

The Carpentry program of study focuses on occupational and educational opportunities related to constructing, installing, and repairing structures and fixtures made of wood (including frameworks, partitions, joists, studding, rafters, and stairways). The program of study includes installing, dismantling, or moving machinery and heavy equipment according to layout plans, blueprints, or other drawings.

Offered to: LMHS and TCHS at the Industrial Trades Center



Secondary Courses for High School Credit

- | | |
|---------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Construction |
| Level 2 | <ul style="list-style-type: none"> Construction Technology I |
| Level 3 | <ul style="list-style-type: none"> Construction Technology II (Required) Applied Mathematics for Technical Professionals (Recommended) |
| Level 4 | <ul style="list-style-type: none"> Practicum in Construction Technology |

Aligned Advanced Academic Courses

Dual Credit	Dual credit offerings will vary by local education agency.
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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

- Intern with a carpenter to practice skills such as measuring materials and assembling structures
- Participate in a pre-apprenticeship that includes activities like installing cabinets, drywall, and siding

Expanded Learning Opportunities

- Shadow a construction manager to learn more about how construction teams work together to complete projects
- Participate in Design Build Contest

Aligned Industry-Based Certifications

- NCCER Carpentry Level I
- NCCER Carpentry Level II
- NCCER Core



Example Postsecondary Opportunities

Apprenticeships

- Carpenter

Associate Degrees

- Construction Management
- Construction Engineering Technology
- Building Construction Technology

Bachelor's Degrees

- Construction Engineering
- Construction Science
- Construction Site Management

Master's, Doctoral, and Professional Degrees

- Construction Engineering Technology
- Construction Engineering
- Construction Management
- Project Management



Example Aligned Occupations

Drywall and Ceiling Tile Installers

Median Wage: \$44,699
Annual Openings: 758
10-Year Growth: 14%

Carpenters

Median Wage: \$46,272
Annual Openings: 5,623
10-Year Growth: 15%

Construction Managers

Median Wage: \$95,072
Annual Openings: 6,325
10-Year Growth: 24%





Architecture and Construction Career Cluster

Statewide Program of Study: Carpentry

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Construction 13004220 (1 credit)	Prerequisites: None Corequisites: None Required: Drug testing is mandatory for this course	7841

Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment. Students will need to purchase appropriate boots.

Level 2

Course	Prerequisites Corequisites	Local Course #
Construction Technology I 13005100 (2 credits)	Prerequisites: None Corequisites: None Required: Drug testing is mandatory for this course	7866

In Construction Technology I, students will gain knowledge and skills needed to enter the workforce as carpenters or building maintenance supervisors or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will acquire knowledge and skills in safety, tool usage, building materials, codes, and framing. Students will be required to purchase boots.

Level 3

Course	Prerequisites Corequisites	Local Course #
Construction Technology II 13005200 (2 credits)	Prerequisites: Construction Technology I Corequisites: None Recommended Corequisite: Applied Mathematics for Technical Professionals Required: Drug testing is mandatory for this course	7867

In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians or supervisors, or to prepare for a postsecondary degree in construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills. Students will need to purchase appropriate boots.

Applied Mathematics for Technical Professionals 12701410 (1 credit)	Prerequisites: Construction Technology I Corequisites: None Recommended Corequisite: Construction Technology II	7925
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Applied Mathematics for Technical Professionals uses problem-solving situations, hands-on activities, and technology to extend mathematical thinking and engage student reasoning. Situations relating to technical applications provide students opportunities to make connections with mathematics and the workplace. In addition, students will learn the skills necessary to communicate using mathematics. Hands-on activities will allow students to model, explore, and develop abstract concepts applicable to technical careers.

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Construction Technology 13005250 (2 credits)	Prerequisites: Construction Technology II Corequisites: None Required: Drug testing is mandatory for this course	7846

Practicum in Construction Technology is an occupationally specific course designed to provide classroom technical instruction or on-the-job training experiences. Safety and career opportunities are included in addition to work ethics and job-related study in the classroom. Students will need to purchase appropriate boots.



Architecture and Construction Career Cluster

The Architecture and Construction career cluster focuses on designing, planning, managing, building, and maintaining the built environment. This career cluster includes occupations ranging from architect, carpenter, and construction manager to electrician, plumber and heating, air conditioning and refrigeration technician.

Statewide Program of Study: *Electrical and Instrumentation*

The Electrical program of study focuses on occupational and educational opportunities associated with installing, maintaining, and repairing electrical wiring, equipment, and fixtures. The program of study also addresses installing and repairing telecommunications cable including fiber optics.

Offered to: LMHS and TCHS at the Industrial Trades Center



Secondary Courses for High School Credit

- | | |
|---------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Construction |
| Level 2 | <ul style="list-style-type: none"> Electrical Technology I Occupational Safety & Environmental Technology |
| Level 3 | <ul style="list-style-type: none"> Electrical Technology II (Required) Applied Mathematics for Technical Professionals (Recommended) |
| Level 4 | <ul style="list-style-type: none"> Practicum in Construction Technology |

Aligned Advanced Academic Courses

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

- Participate in an internship with an electrical company to develop installation skills
- Join a pre-apprenticeship program that involves determining if electrical wiring is up to code
- Interview an electrician about their training and education

Expanded Learning Opportunities

- Participate in Houston Livestock Show and Rodeo ICC
- Participate in trade competitions

Aligned Industry-Based Certifications

- NCCER Core
- NCCER Electrical Level I
- NCCER Instrumentation I



Example Postsecondary Opportunities

Apprenticeships

- Electrician

Associate Degrees

- Electrical and Power Transmission Installation
- Electrical Power and Controls
- Electromechanical Technology

Bachelor's Degrees

- Construction Engineering
- Electrical, Electronic, and Communications
- Engineering Electrical Engineering

Master's, Doctoral, and Professional Degrees

- Construction Engineering
- Construction Management

Additional Stackable IBCs/License

- Journeyman Electrician
- Master Electrician



Example Aligned Occupations

Electricians Helpers

Median Wage: \$38,140
Annual Openings: 1,632
10-Year Growth: 20%

Electricians

Median Wage: \$54,769
Annual Openings: 9,221
10-Year Growth: 27%

Construction Managers

Median Wage: \$95,072
Annual Openings: 6,325
10-Year Growth: 24%

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/programs-of-study-additional-resources>



Architecture and Construction Career Cluster

Statewide Program of Study: *Electrical and Instrumentation*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Construction 13004220 (1 credit)	Prerequisites: None Corequisites: None Required: Drug testing is mandatory for this course.	7842

Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment. Students will need to purchase appropriate boots for this course.

Level 2

Course	Prerequisites Corequisites	Local Course #
Electrical Technology I 13005600 (1 credit)	Prerequisites: None Corequisites: Occupational Safety Required: Drug testing is mandatory for this course.	7771

In Electrical Technology, students gain knowledge and skills specific to those needed to enter the work force as an electrician or building maintenance supervisor or prepare for a postsecondary degree in construction. Students acquire knowledge and skills in safety, electrical theory, tools, codes, installation of electrical equipment, and the reading of electrical drawings, schematics, and specifications. Students will need to purchase appropriate boots for this course.

Occupational Safety & Environmental Technology N1303680 (1 credit)	Prerequisites: None Corequisites: Electrical Technology I Required: Drug testing is mandatory for this course.	7868
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Students will investigate the field of Occupational Safety and Health Administration and Environmental Technology, which is charged with the tasks of ensuring that business and industry provide a safe workplace, free from hazards and bringing about a reduction in the occurrence of job-related injuries and fatalities. Students will need to purchase appropriate boots for this course.

Level 3

Course	Prerequisites Corequisites	Local Course #
Electrical Technology II 13005700 (2 credits)	Prerequisites: Electrical Technology I Corequisites: None Recommended Corequisite: Applied Mathematics for Technical Professionals Required: Drug testing is mandatory for this course.	7844

In Advanced Electrical Technology, students gain advanced knowledge and skills specific to those needed to enter the work force as an electrician or building maintenance technician or supervisor or prepare for a postsecondary degree in construction. Students acquire knowledge and skills in safety, electrical theory, tools, codes, installation of electrical equipment, alternating current and direct current motors, conductor installation, installation of electrical services, and electric lighting installation. Students will need to purchase appropriate boots for this course.

Applied Mathematics for Technical Professionals 12701410 (1 credit)	Prerequisites: Electrical Technology I Corequisites: None Recommended Corequisite: Construction Technology II	7925
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Applied Mathematics for Technical Professionals uses problem-solving situations, hands-on activities, and technology to extend mathematical thinking and engage student reasoning. Situations relating to technical applications provide students opportunities to make connections with mathematics and the workplace. In addition, students will learn the skills necessary to communicate using mathematics. Hands-on activities will allow students to model, explore, and develop abstract concepts applicable to technical careers.

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Construction Technology 13005250 (2 credits)	Prerequisites: Electrical Technology II Corequisites: None Required: Drug testing is mandatory for this course.	7847

Practicum in Construction Technology is an occupationally specific course designed to provide classroom technical instruction or on-the-job training experiences. Safety and career opportunities are included in addition to work ethics and job-related study in the classroom. Students will need to purchase appropriate boots for this course.



Architecture and Construction Career Cluster

The Architecture and Construction career cluster focuses on designing, planning, managing, building, and maintaining the built environment. This career cluster includes occupations ranging from architect, carpenter, and construction manager to electrician, plumber and heating, air conditioning, and refrigeration technician.

Statewide Program of Study: Pipefitting

The Plumbing and Pipefitting program of study focuses on occupational and educational opportunities related to assembling, installing, and repairing pipes, fittings, or fixtures of heating, water, and drainage systems. The program of study includes maintaining pipe supports and related hydraulic or pneumatic equipment for steam, hot water, heating, cooling, lubricating, and sprinkling.

Offered to: LMHS and TCHS at the Industrial Trades Center



Secondary Courses for High School Credit

- | | |
|----------------|---|
| Level 1 | • Principles of Construction |
| Level 2 | • Pipefitting Technology I + Pipefitting Technology Lab I |
| Level 3 | • Pipefitting Technology II + Pipefitting Technology Lab II (Required)
• Applied Mathematics for Technical Professionals (Recommended) |
| Level 4 | • Practicum in Construction Technology |

Aligned Advanced Academic Courses

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

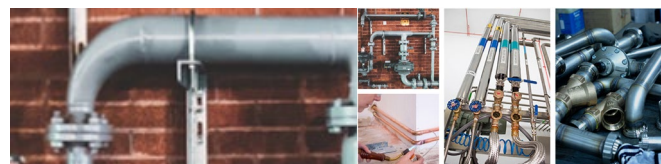
- Complete a pre-apprenticeship in plumbing or pipefitting to develop skills in assembling, installing, and repairing pipes
- Shadow a plumber who is repairing and drainage systems

Expanded Learning Opportunities

- Participate in Houston Livestock Show and Rodeo ICC
- Tour apprenticeship programs

Aligned Industry-Based Certifications

- NCCER Core
- NCCER Pipefitting Level I
- NCCER Pipefitting Level II



Example Postsecondary Opportunities

Apprenticeships

- Pipefitter

Associate Degrees

- Pipefitting/Pipefitter and Sprinkler Fitter
- Construction Site Management
- Plumbing Technology
- Property Maintenance

Bachelor's Degrees

- Construction Engineering
- Construction Management

Master's, Doctoral, and Professional Degrees

- Construction Engineering
- Construction Management

Additional Stackable IBCs/License

- Journeyman Plumber
- Master Plumber



Example Aligned Occupations

Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters

Median Wage: \$36,352
Annual Openings: 1,482
10-Year Growth: 26%

Plumbers, Pipefitters, and Steamfitters

Median Wage: \$55,804
Annual Openings: 5,751
10-Year Growth: 22%

Construction Managers

Median Wage: \$95,072
Annual Openings: 6,325
10-Year Growth: 24%

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/programs-of-study-additional-resources>



Architecture and Construction Career Cluster

Statewide Program of Study: *Pipefitting*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Construction 13004220 (1 credit)	Prerequisites: None Corequisites: None Required: Drug testing is mandatory for this course	7865
<p>Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment. Students will be required to purchase boots.</p>		

Level 2

Course	Prerequisites Corequisites	Local Course #
Pipefitting Technology I/Lab N1300427 (2 credits)	Prerequisites: Algebra I Corequisites: None Required: Drug testing is mandatory for this course	7874
<p>Students will learn the types of work performed, responsibilities and career opportunities within the industry, and safety principles associated with pipefitting. Additionally, students will learn care, selection, and use of hand and power tools of the trade and ladder and scaffold safety, selection, construction, and the associated hazards. Oxyfuel cutting and associated safety procedures will be reinforced. Students will learn the maintenance, operation, and safety of motorized equipment. Students will be required to purchase boots.</p>		

Level 3

Course	Prerequisites Corequisites	Local Course #
Pipefitting Technology II/Lab N1300428 (2 credits)	Prerequisites: Pipefitting Technology I/Lab Corequisites: None Recommended Corequisite: Applied Mathematics for Technical Professionals Required: Drug testing is mandatory for this course	7875
<p>Students will learn about, be able to identify and install various types of piping systems and valves. Students will learn to read detail and drawing sheets and how to use mathematics to solve problems related to Pipefitting construction. Students will also be educated in how to prepare, fabricate, and assemble threaded pipe, socket weld, and butt weld installations. Excavating per Occupational Safety and Health Administration (OSHA) standards as well as grading and elevations of trenching and backfilling will also be taught. Students will be required to purchase boots.</p>		
Applied Mathematics for Technical Professionals 12701410 (1 credit)	Prerequisites: Construction Technology I Corequisites: None Recommended Corequisite: Pipefitting Technology II/Lab	7925
<p>Applied Mathematics for Technical Professionals uses problem-solving situations, hands-on activities, and technology to extend mathematical thinking and engage student reasoning. Situations relating to technical applications provide students opportunities to make connections with mathematics and the workplace. In addition, students will learn the skills necessary to communicate using mathematics. Hands-on activities will allow students to model, explore, and develop abstract concepts applicable to technical careers.</p>		

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Construction Technology 13005250 (2 credits)	Prerequisites: Pipefitting Technology II/Lab Corequisites: None Required: Drug testing is mandatory for this course	7848
<p>Practicum in Construction Technology is an occupationally specific course designed to provide classroom technical instruction or on-the-job training experiences. Safety and career opportunities are included in addition to work ethics and job-related study in the classroom. Students will be required to purchase boots.</p>		

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

Arts, Audio Visual Technology, and Communication Career Cluster

The Arts, Audio Visual Technology, and Communication (AAVTC) career cluster focuses on designing, producing, exhibiting, performing, writing, and publishing multimedia content requiring creative aptitude, fluency in computer and technology applications, and proficiency in oral and written communication. This career cluster includes occupations ranging from camera operator, audio and video technician, director, and producer to graphic designer and web and digital interface designer.

Statewide Program of Study: *Digital Communications*

The Digital Communications program of study focuses on occupational and educational opportunities associated with the production of audio and visual media formats for various purposes, such as TV broadcasts, advertising, video production, or motion pictures. The program of study includes operating machines and equipment such as microphones, sound speakers, video screens, projectors, video monitors, sound and mixing boards, and related electronic equipment to record sound and images.

Offered to: LMHS and TCHS



Secondary Courses for High School Credit

- | | |
|----------------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Arts, Audio/Video Technology, and Communications |
| Level 2 | <ul style="list-style-type: none"> Audio/Video Production I |
| Level 3 | <ul style="list-style-type: none"> Audio/Video Production II/Lab |
| Level 4 | <ul style="list-style-type: none"> Practicum in Audio/Video Production |



Example Postsecondary Opportunities

Apprenticeships

- Light Technician

Associate Degrees

- Commercial and Advertising Art
- Animation, Interactive Technology, Video Graphics, and Special Effects

Bachelor's Degrees

- Cinematography and Film/Video Production
- Recording Arts Technology

Master's, Doctoral, and Professional Degrees

- Animation, Interactive Technology, Video Graphics, and Special Effects
- Communications Technology

Additional Stackable IBCs/License

- CompTIA Digital Media and Entertainment Professional Certification (DMEP)



Example Aligned Occupations

Camera Operators, Television, Video, and Film

Median Wage: \$48,422
Annual Openings: 155
10-Year Growth: 20%

Audio and Video Technicians

Median Wage: \$46,319
Annual Openings: 626
10-Year Growth: 30%

Producers and Directors

Median Wage: \$65,029
Annual Openings: 522
10-Year Growth: 12%

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/programs-of-study-additional-resources>

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> Shadow a sound designer to learn how sound and foley are created for movies or podcasts Intern with a technical director at a sports team, recording studio, or radio station Shadow a technician on a live news broadcast, concert, or other event
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in SkillsUSA or TSA Participate in Student Television Network Capture and edit film and audio for a podcast with a local community organization

Aligned Industry-Based Certifications

- Adobe Certified Professional in Digital Video Using Adobe Premiere Pro
- Digital Video Production Foundations

Arts, Audio Visual Technology, and Communication Career Cluster

Statewide Program of Study: *Digital Communications*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Arts, Audio/Video Technology, and Communications 13008200 (1 credit)	Prerequisites: None Corequisites: None	7755

Careers in the Arts, Audio/Video Technology, and Communications career cluster require, in addition to creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

Level 2

Course	Prerequisites Corequisites	Local Course #
Audio/Video Production I 13008500 (1 credit)	Prerequisites: Principles of AAVTC Corequisites: None	7756

Introduces students to careers in audio and video technology and film production span all aspects of the audio/video communications industry. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an understanding of the industry with a focus on pre-production, production, and post-production audio and video activities.

Level 3

Course	Prerequisites Corequisites	Local Course #
Audio/Video Production II/Lab 13008610 (2 credits)	Prerequisites: Audio/Video Production I Corequisites: None *New for LMHS 2026-2027	7853

Introduces students to careers in audio and video technology and film production span all aspects of the audio/video communications industry. Within this context, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post-production activities. This course may be implemented in an advanced audio format or an advanced format, including both audio and video.

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Audio/Video Production 13008700 (2 credits)	Prerequisites: Audio/Video Production II and Audio/Video Production II Lab Corequisites: None *New for LMHS 2027-2028	7758

Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications career cluster, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production audio and video activities in a studio environment. This course may be implemented in an advanced audio, video, or animation format.

For additional information on the **Arts, Audio Visual Technology and Communication** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Business, Marketing, and Finance Career Cluster

The Business, Marketing, and Finance career cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. This career cluster includes occupations ranging from business owner and entrepreneur to accountant, retail manager, and market analyst.

Statewide Program of Study: **Business Management**

The Business Management program of study focuses on occupational and educational opportunities associated with planning, directing, and coordinating the administrative services and operations of an organization. It includes formulating policies, managing daily operations, and allocating the use of materials and human resources. This program of study also introduces students to mathematical modeling tools and organizational evaluation methods.

Offered to: LMHS and TCHS



Secondary Courses for High School Credit

- | | |
|----------------|---|
| Level 1 | • Business Information Management I |
| Level 2 | • Business Information Management II |
| Level 3 | • Career Preparation for Programs of Study |
| Level 4 | • Career Preparation for Programs of Study/Extended |

Aligned Advanced Academic Courses

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

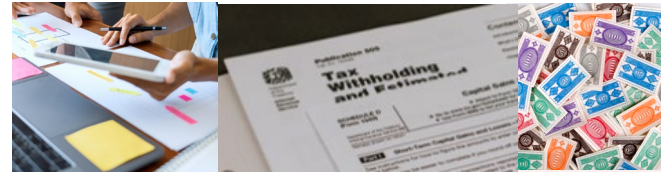
- Intern at local business in the HR department
- Shadow the COO of a local business or chamber of commerce

Expanded Learning Opportunities

- Participate in BPA, DECA, FBLA, or related UIL events
- Explore student membership in related professional organizations

Aligned Industry-Based Certifications

- Microsoft Office Specialist: Microsoft Excel Expert
- Microsoft Office Specialist: Microsoft Word Expert



Example Postsecondary Opportunities

Associate Degrees

- Business Administration and Management
- Human Resources Management

Bachelor's Degrees

- Business Analytics
- Accounting and Business

Master's, Doctoral, and Professional Degrees

- Business Administration and Management
- Organizational Leadership

Additional Stackable IBCs/License

- Professional Certificate in Team Leadership
- Property Tax Professionals



Example Aligned Occupations

First-Line Supervisors of Administrative Support Workers

Median Wage: \$59,585
Annual Openings: 13,885
10-Year Growth: 9%

Human Resources Specialists

Median Wage: \$61,278
Annual Openings: 6,239
10-Year Growth: 23%

General and Operations Managers

Median Wage: \$83,220
Annual Openings: 25,450
10-Year Growth: 23%

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/programs-of-study-additional-resources>



Business, Marketing, and Finance Career Cluster

Statewide Program of Study: *Business Management*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Business Information Management I 13011400 (1 credit)	Prerequisites: None Corequisites: None	7767
In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.		

Level 2

Course	Prerequisites Corequisites	Local Course #
Business Information Management II 13011500 (1 credit)	Prerequisites: Business Information Management I Corequisites: None	7768
This is an occupationally specific course which introduces the concepts and skills for producing business documents and correspondence through the use of the document cycle and word processing equipment. Special emphasis is placed on automated management of business records, database management, electronic spreadsheets, and management of information flow, electronic mail, desktop publishing, and graphics. The course provides preparation for employment or advanced standing at the postsecondary level.		

Level 3

Course	Prerequisites Corequisites	Local Course #
Career Preparation for Programs of Study 12701121 (2 credits)	Prerequisites: Two CTE course within the same program of study Corequisites: None	7729
Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. Must maintain a work schedule totaling a minimum of ten hours per week.		

Level 4

Course	Prerequisites Corequisites	Local Course #
Career Preparation for Programs of Study/Extended 12701141 (3 credits)	Prerequisites: Career Preparation for Programs of Study Corequisites: None	7816
Career Preparation II provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success. Must maintain a work schedule totaling a minimum of fifteen hours per week.		

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



Business, Marketing, and Finance Career Cluster

The Business, Marketing, and Finance career cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. This career cluster includes occupations ranging from business owner and entrepreneur to accountant, retail manager, and market analyst.

Statewide Program of Study: **Marketing**

The Marketing and Sales program of study focuses on occupational and educational opportunities associated with collecting information to estimate potential sales of a product or service and create campaigns to market or distribute goods and services. It includes applying data related to customer demographics, preferences, needs, and buying habits.

Offered to: TCHS



Secondary Courses for High School Credit

Level 1 • Principles of Business, Marketing, and Finance

Level 2 • Virtual Business
• Social Media Marketing

Level 3 • Advanced Marketing

Level 4 • Practicum in Marketing

Aligned Advanced Academic Courses

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

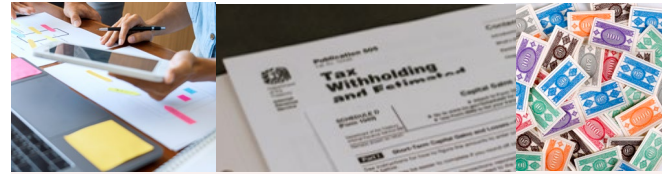
- Intern at a marketing and advertising company
- Job shadow a pharmaceutical sales representative
- Intern at a local retail company

Expanded Learning Opportunities

- Job shadow an account representative at a marketing firm
- Participate in BPA, DECA, FBLA, or related UIL events

Aligned Industry-Based Certifications

- Entrepreneurship and Small Business



Example Postsecondary Opportunities

Associate Degrees

- Marketing/Marketing Management
- Retail Management

Bachelor's Degrees

- Business Administration
- Marketing/Marketing Management
- Fashion Merchandising

Master's, Doctoral, and Professional Degrees

- Business Administration
- Applied Economics
- Business Analytics

Additional Stackable IBCs/License

- Salesforce
- Service Contract Providers



Example Aligned Occupations

Retail Salespersons

Median Wage: \$28, 356
Annual Openings: 56,132
10-Year Growth: 15%

Market Research Analysts

Median Wage: \$60,926
Annual Openings: 5,688
10-Year Growth: 35%

Sales Managers

Median Wage: \$123,729
Annual Openings: 3,368
10-Year Growth: 21%





Business, Marketing, and Finance Career Cluster

Statewide Program of Study: *Marketing*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Business, Marketing, and Finance 13011200 (1 credit)	Prerequisites: None Corequisites: None	7764

In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

Level 2

Course	Prerequisites Corequisites	Local Course #
Social Media Marketing 13034650 (0.5 credit)	Prerequisites: Principles of BMF Corequisites: <i>Virtual Business</i> *Fall Semester	7765

This course will provide students with a thorough understanding of the marketing concepts and theories that apply to sports and sporting events and entertainment. The areas this course will cover include basic marketing, target marketing and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and implementation of sports and entertainment marketing plans. This course will also provide students an opportunity to develop promotional plans, sponsorship proposals, endorsement contracts, sports and entertainment marketing plans, and evaluation and management techniques.

Virtual Business 13012000 (0.5 credit)	Prerequisites: Principles of BMF Corequisites: <i>Social Media Marketing</i> *Spring Semester	7766
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This course is designed to provide a comprehensive introduction to the principles and practices of advertising. Students will gain knowledge of techniques used in current advertising, including print, broadcast, and digital media. The course explores the social, cultural, ethical, and legal issues of advertising, historical influences, strategies, media decision.

Level 3

Course	Prerequisites Corequisites	Local Course #
Advanced Marketing 13034700 (2 credits)	Prerequisites: Virtual Business, Social Media Marketing Corequisites: None	7856

Students will run the 409stingstore plus create and apply marketing, accounting, purchasing, web development skills in this 2-hour class. Advanced Marketing is a series of dynamic activities that focus on the customer to generate a profitable exchange. Students gain knowledge and skills that help them to be proficient in one or more of the marketing functional areas associated with distribution, financing, marketing information management, pricing, product planning, promotion, purchasing, risk management, and selling skills. Students integrate skills from academic subjects, information technology, interpersonal communication, and management training to make responsible decisions.

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



Business, Marketing, and Finance Career Cluster

Statewide Program of Study: *Marketing*

Course Information

Level 4	Course	Prerequisites Corequisites	Local Course #
	Practicum in Marketing 13034800 (2 credits)	Prerequisites: Advanced Marketing Corequisites: None	7857
<p>Practicum in Marketing is a series of dynamic activities that focus on the customer to generate a profitable exchange. Students will gain knowledge and skills that help them to be proficient in one or more of the marketing functional areas associated with distribution, financing, marketing information management, pricing, product planning, promotion, purchasing, risk management, and selling skills. Students will integrate skills from academic subjects, information technology, interpersonal communication, and management training to make responsible decisions. The practicum course is a paid or unpaid experience for students participating in a coherent sequence of career and technical courses in marketing.</p>			

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



Education and Training Career Cluster

The Education and Training career cluster focuses on planning, managing, and providing education and training services and related learning support services. All parts of courses are designed to introduce learners to the various careers available within the Education and Training career cluster. This career cluster includes a diverse spectrum of occupations, ranging from teaching assistant, classroom teacher, to school administrator.

Statewide Program of Study: Teaching and Training

The Teaching and Training program of study focuses on occupational and educational opportunities associated with careers related to teaching, instructing, and creating instructional and enrichment materials. The program of study includes recognizing a variety of student groups and their corresponding needs, identifying processes for developing curriculum and coordinating educational content, and coaching groups and individuals.

Offered to: LMHS and TCHS



Secondary Courses for High School Credit

- | | |
|----------------|--|
| Level 1 | • Principles of Education and Training |
| Level 2 | • Child Development |
| Level 3 | • Instructional Practices |
| Level 4 | • Practicum in Education and Training |

Aligned Advanced Academic Courses

Dual Credit Dual credit offerings will vary by local educational 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

- Serve as a camp counselor to learn mentoring, facilitation, and lesson planning skills
- Volunteer in a tutoring center to learn lesson planning and skills assessment

Expanded Learning Opportunities

- Participate in FCCLA
- Participate in TAFE

Aligned Industry-Based Certifications

- Educational Aide I



Example Postsecondary Opportunities

Apprenticeships

- Teacher Apprentice

Associate Degrees

- Adult and Continuing Education and Teaching
- Educational/Instructional Technology

Bachelor's Degrees

- Elementary Education and Teaching
- Secondary Education and Teaching

Master's, Doctoral, and Professional Degrees

- Educational Leadership and Administration, General
- Curriculum and Instruction

Additional Stackable IBCs/License

- Generalist, Grades EC-4



Example Aligned Occupations

Teaching Assistants, Except Postsecondary

Median Wage: \$28,066
Annual Openings: 10,000
10-Year Growth: 15%

Secondary School Teachers, Except Special Education and CTE

Median Wage: \$61,035
Annual Openings: 8,288
10-Year Growth: 14%

Education Administrators, Kindergarten through Secondary

Median Wage: \$81,976
Annual Openings: 2,676
10-Year Growth: 14%

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/programs-of-study-additional-resources>



Education and Training Career Cluster

Statewide Program of Study: Teaching and Training

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Education and Training 13014200 (1 credit)	Prerequisites: None Corequisites: None	7700

The Principles of Education and Training course is designed to introduce students to the various careers available within the education and training career cluster. Students use self-knowledge and educational and career information to analyze various careers within the education and training career cluster. Students will also gain an understanding of the basic knowledge and skills essential to teaching inside the classroom. Students will develop a plan to job shadow and intern at a field site school.

Level 2

Course	Prerequisites Corequisites	Local Course #
Child Development 13024700 (1 credit)	Prerequisites: Principles of Education and Training Corequisites: None	7912

Child Development is a course that addresses knowledge and skills related to child growth and development from prenatal through school-age children. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

Level 3

Course	Prerequisites Corequisites	Local Course #
Instructional Practices 13014400 (2 credits)	Prerequisites: One credit from Education and Training career cluster Corequisites: None *Potential Dual Credit	7702 Dual Credit 7910

The primary objective of Instructional Practices in Education and Training (Ready, Set, Teach) is to develop background knowledge of child and adolescent developmental principles as well as principles of effective teaching practices. Students will under the direction of a family and consumer science teacher and a mentoring teacher in direct instructional roles. Students will plan direct individualized instruction and group activities, prepare instructional materials and complete other responsibilities of classroom teachers. Students will engage in applications of principles/practices in the classroom. This course not only offers direct field experience but is a fun hands-on way to explore the career field of education.

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Education and Training 13014500 (2 credits)	Prerequisites: Instructional Practices Corequisites: None *Potential Dual Credit	7707 Dual Credit 7911

Practicum in Education and Training (Ready, Set, Teach II) is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a Family and consumer Science teacher and educators in direct instructional roles with elementary, middle school, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.

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



Health Science Career Cluster

The Health Science career cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.

Statewide Program of Study: *Health Science- Dentistry*

The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

Offered to: TCHS

Secondary Courses for High School Credit

- | | |
|---------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Health Science |
| Level 2 | <ul style="list-style-type: none"> Medical Terminology |
| Level 3 | <ul style="list-style-type: none"> Health Science Theory (Required) Anatomy and Physiology (Recommended) |
| Level 4 | <ul style="list-style-type: none"> Practicum in Health Science (Required) Medical Microbiology (Recommended) |

Aligned Advanced Academic Courses

Dual Credit	Dual credit offerings will vary by local education agency.
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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

- Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility
- Participate in job shadowing experiences such as Emergency Medical Services (EMS) ride along or hospital/clinical job

Expanded Learning Opportunities

- Participate in Health Occupation Students of America (HOSA) or SkillsUSA
- Participate in Advanced Medical Ambulance Bus (AMBUS) event or Community Emergency Response Team (CERT) event

Aligned Industry-Based Certifications

- Dental Technician



Example Postsecondary Opportunities

Apprenticeships

- Medical Assistant

Associate Degrees

- Dental Assisting

Bachelor's Degrees

- Dental Hygienist

Master's, Doctoral, and Professional Degrees

- Medicine
- Occupational Therapy
- Dentist



Example Aligned Occupations

Medical Assistants

Median Wage: \$36,834
Annual Openings: 11,638
10-Year Growth: 29%

Dental Hygienists

Median Wage: \$79,663
Annual Openings: 1,352
10-Year Growth: 32%

Physician Assistants

Median Wage: \$127,332
Annual Openings: 974
10-Year Growth: 41%

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/programs-of-study-additional-resources>



Health Science Career Cluster

Statewide Program of Study: *Health Science- Dentistry*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Health Science 13020200 (1 credit)	Prerequisites: None Corequisites: None	7735
This is the first of a sequence of courses offered in the Health Science Technology Career Tech Program, which prepares the student for a career as a health care professional. Students will learn leadership skills, safety skills in health care setting, health care systems, Anatomy and physiology, professionalism, overview of careers in the health care field, as well as Life stages. Students will be certified with health care provider CPR as well.		

Level 2

Course	Prerequisites Corequisites	Local Course #
Medical Terminology 13020300 (1 credit)	Prerequisites: Principles of Health Science, Biology or IPC Corequisites: None	7745
This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.		

Level 3

Course	Prerequisites Corequisites	Local Course #
Health Science Theory 13020400 (1 credit)	Prerequisites: One credit in Biology and at least one credit in a course from the Health Science career cluster Recommended Corequisites: Anatomy and Physiology	7829
The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.		
Anatomy and Physiology 13020600 (1 credit)	Prerequisites: One credit in Biology and one credit in Chemistry, Integrated Physics and Chemistry, or Physics Recommended Corequisites: Health Science Theory and Clinicals *Weighted Credit	7742
Students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem-solving. Topics will be presented through the integration of biology, chemistry, and physics. Students will study the structures and functions of the human body and body systems. Students will investigate the body's responses to forces, maintenance of homeostasis, electrical interactions, transport systems, and energy systems. Outside research will be required. This course will satisfy the 3rd or 4th Science graduation requirement.		

For additional information on the **Health Science** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Health Science Career Cluster

Statewide Program of Study: *Health Science- Dentistry*

Course Information

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Health Science- Dentistry 13020500 (2 credits)	Prerequisites: Health Science Theory and 3 Science credits including Biology Recommended Corequisites: Medical Microbiology *Offered at College of the Mainland	7739
<p>The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. There is a student clinical fee that will be required to participate in the Practicum of Health Science class. Additional fees may be required to obtain a health science certification.</p>		
Medical Microbiology 13020700 (1 credit)	Prerequisites: Biology and Chemistry Recommended Corequisites: Practicum in Health Science	7715
<p>The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Students must meet the 40% laboratory and fieldwork requirement. This course satisfies a high school science graduation requirement.</p>		

For additional information on the **Health Science** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Health Science Career Cluster

The Health Science career cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.

Statewide Program of Study: **Health Science- EMT**

The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

Offered to: LMHS and TCHS

Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> Principles of Health Science
Level 2	<ul style="list-style-type: none"> Medical Terminology
Level 3	<ul style="list-style-type: none"> Health Science Theory/Clinical (Required) Anatomy and Physiology (Recommended)
Level 4	<ul style="list-style-type: none"> Practicum in Health Science (Required) Medical Microbiology (Recommended TCHS only)

Aligned Advanced Academic Courses

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

- Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility
- Participate in job shadowing experiences such as Emergency Medical Services (EMS) ride along or hospital/clinical job

Expanded Learning Opportunities

- Participate in Health Occupation Students of America (HOSA) or SkillsUSA
- Participate in Advanced Medical Ambulance Bus (AMBUS) event or Community Emergency Response Team (CERT) event

Aligned Industry-Based Certifications

- Emergency Medical Technician–Basic
- Emergency Medical Responder



Example Postsecondary Opportunities

Apprenticeships

- Medical Assistant

Associate Degrees

- Emergency Medical Technology
- Emergency Medical Responder
- Paramedic

Bachelor's Degrees

- Emergency Medical Technology
- Emergency Management



Example Aligned Occupations

Medical Assistants

Median Wage: \$36,834
Annual Openings: 11,638
10-Year Growth: 29%

EMT

Median Wage: \$53,561
Annual Openings: 1,590
10-Year Growth: 6%

Physician Assistants

Median Wage: \$127,332
Annual Openings: 974
10-Year Growth: 41%

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/programs-of-study-additional-resources>



Health Science Career Cluster

Statewide Program of Study: *Health Science- EMT*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Health Science 13020200 (1 credit)	Prerequisites: None Corequisites: None	7735
This is the first of a sequence of courses offered in the Health Science Technology Career Tech Program, which prepares the student for a career as a health care professional. Students will learn leadership skills, safety skills in health care setting, health care systems, Anatomy and physiology, professionalism, overview of careers in the health care field, as well as Life stages. Students will be certified with health care provider CPR as well.		

Level 2

Course	Prerequisites Corequisites	Local Course #
Medical Terminology 13020300 (1 credit)	Prerequisites: Principles of Health Science, Biology or IPC Corequisites: None	7745
This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.		

Level 3

Course	Prerequisites Corequisites	Local Course #
Health Science Theory/Clinical 13020410 (2 credits)	Prerequisites: One credit in Biology and at least one credit in a course from the Health Science career cluster Recommended Corequisites: Anatomy and Physiology *Weighted Credit	7830
This level three course is designed to allow students to explore a vast number of health careers & shadow health care professionals in the following clinical settings at Mainland Medical Center: nursing, physical and occupational therapy, radiology, pharmacy, occupational medicine, dietary, hyperbaric medicine, sterile processing, and medical laboratory and more. 3 hours each week are in classroom lecture, discussion, and skills training. There are student fees that are required for the clinical rotations. A uniform fee of \$48 and a clinical lab fee of \$42.00.		
Anatomy and Physiology 13020600 (1 credit)	Prerequisites: One credit in Biology and one credit in Chemistry, Integrated Physics and Chemistry, or Physics Recommended Corequisites: Health Science Theory/Clinicals *Weighted Credit	7742
Students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem-solving. Topics will be presented through the integration of biology, chemistry, and physics. Students will study the structures and functions of the human body and body systems. Students will investigate the body's responses to forces, maintenance of homeostasis, electrical interactions, transport systems, and energy systems. Outside research will be required. This course will satisfy the 3rd or 4th Science graduation requirement.		

For additional information on the **Health Science** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Health Science Career Cluster

Statewide Program of Study: *Health Science- EMT*

Course Information

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Health Science- EMT 13020500 (2 credits)	Prerequisites: Health Science Theory and 3 Science credits including Biology Recommended Corequisites: Medical Microbiology *Offered at College of the Mainland	7738
<p>The Practicum in Health Science course is designed to give students practical application of previously studied knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience. There is a student clinical fee that will be required to participate in the Practicum of Health Science class. Additional fees may be required to obtain a health science certification.</p>		
Medical Microbiology 13020700 (1 credit)	Prerequisites: Biology and Chemistry Recommended Corequisites: Practicum in Health Science *TCHS Only	7715
<p>The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Students must meet the 40% laboratory and fieldwork requirement. This course satisfies a high school science graduation requirement.</p>		

For additional information on the **Health Science** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Health Science Career Cluster

The Health Science career cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.

Statewide Program of Study: **Health Science- Nursing**

The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

Offered to: LMHS and TCHS

Secondary Courses for High School Credit

- | | |
|---------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Health Science |
| Level 2 | <ul style="list-style-type: none"> Medical Terminology |
| Level 3 | <ul style="list-style-type: none"> Health Science Theory/Clinical (Required) Anatomy and Physiology (Recommended) |
| Level 4 | <ul style="list-style-type: none"> Practicum in Health Science (Required) Medical Microbiology (Recommended TCHS only) |

Aligned Advanced Academic Courses

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

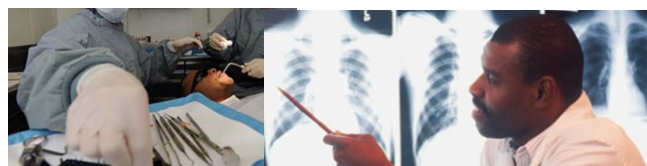
- Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility
- Participate in job shadowing experiences such as Emergency Medical Services (EMS) ride along or hospital/clinical job

Expanded Learning Opportunities

- Participate in Health Occupation Students of America (HOSA) or SkillsUSA
- Participate in Advanced Medical Ambulance Bus (AMBUS) event or Community Emergency Response Team (CERT) event

Aligned Industry-Based Certifications

- Patient Care Technician



Example Postsecondary Opportunities

Apprenticeships

- Medical Assistant

Associate Degrees

- Emergency Medical Technology
- Radiologic Technology/Science
- Registered Nurse

Bachelor's Degrees

- Emergency Medical Technology
- Medical Insurance Coding
- Nursing

Master's, Doctoral, and Professional Degrees

- Medicine
- Occupational Therapy



Example Aligned Occupations

Medical Assistants

Median Wage: \$36,834
Annual Openings: 11,638
10-Year Growth: 29%

Registered Nurse

Median Wage: \$74,540
Annual Openings: 16,210
10-Year Growth: 6%

Physician Assistants

Median Wage: \$127,332
Annual Openings: 974
10-Year Growth: 41%

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/programs-of-study-additional-resources>



Health Science Career Cluster

Statewide Program of Study: *Health Science- Nursing*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Health Science 13020200 (1 credit)	Prerequisites: None Corequisites: None	7735
<p>This is the first of a sequence of courses offered in the Health Science Technology Career Tech Program, which prepares the student for a career as a health care professional. Students will learn leadership skills, safety skills in health care setting, health care systems, Anatomy and physiology, professionalism, overview of careers in the health care field, as well as Life stages. Students will be certified with health care provider CPR as well.</p>		

Level 2

Course	Prerequisites Corequisites	Local Course #
Medical Terminology 13020300 (1 credit)	Prerequisites: Principles of Health Science, Biology or IPC Corequisites: None	7745
<p>This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.</p>		

Level 3

Course	Prerequisites Corequisites	Local Course #
Health Science Theory/Clinical 13020410 (2 credits)	Prerequisites: One credit in Biology and at least one credit in a course from the Health Science career cluster Recommended Corequisites: Anatomy and Physiology *Weighted Credit	7830
<p>This level three course is designed to allow students to explore a vast number of health careers & shadow health care professionals in the following clinical settings at Mainland Medical Center: nursing, physical and occupational therapy, radiology, pharmacy, occupational medicine, dietary, hyperbaric medicine, sterile processing, and medical laboratory and more. 3 hours each week are in classroom lecture, discussion, and skills training. There are student fees that are required for the clinical rotations. A uniform fee of \$48 and a clinical lab fee of \$42.00.</p>		
Anatomy and Physiology 13020600 (1 credit)	Prerequisites: One credit in Biology and one credit in Chemistry, Integrated Physics and Chemistry, or Physics Recommended Corequisites: Health Science Theory/Clinical *Weighted Credit	7742
<p>Students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem-solving. Topics will be presented through the integration of biology, chemistry, and physics. Students will study the structures and functions of the human body and body systems. Students will investigate the body's responses to forces, maintenance of homeostasis, electrical interactions, transport systems, and energy systems. Outside research will be required. This course will satisfy the 3rd or 4th Science graduation requirement.</p>		

For additional information on the **Health Science** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Health Science Career Cluster

Statewide Program of Study: *Health Science- Nursing*

Course Information

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Health Science- Nursing 13020500 (2 credits)	Prerequisites: Health Science Theory and 3 Science credits including Biology Recommended Corequisites: Medical Microbiology *Weighted credit	7737
<p>This Level four course is an occupation specific course designed to provide knowledge and skills for post-secondary education in health careers. Students develop advanced clinical skills needed for employment in the health care industry. Six hours each week are in clinical experience in a health care community setting and three hours each week are in the classroom. The classroom phase will include medical terminology where students will learn the "language of medicine." Students acquire word building skills by relating terms to body systems. **Students must have own transportation for this course. ** Uniforms are required and are worn during clinical rotations and field trips. There is a student clinical fee of \$ 42.00 that is required to participate in the Practicum of Health Science class. Additional fees may be required to obtain a health science certification.</p>		
Medical Microbiology 13020700 (1 credit)	Prerequisites: Biology and Chemistry Recommended Corequisites: Practicum in Health Science *TCHS only	7715
<p>The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Students must meet the 40% laboratory and fieldwork requirement. This course satisfies a high school science graduation requirement.</p>		

For additional information on the **Health Science** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Health Science Career Cluster

The Health Science career cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development. This career cluster includes occupations ranging from medical assistant, registered nurse, and physical therapist to forensic science technician and athletic trainer.

Statewide Program of Study: **Health Science- Pharmacology**

The Diagnostic and Therapeutic Services program of study focuses on occupational and educational opportunities associated with diagnosing and treating acute, episodic, or chronic illness independently or as part of a healthcare team. This program of study includes exploration of patient treatment and rehabilitative programs that help build or restore daily living skills to persons with disabilities or developmental delays.

Offered to: TCHS

Secondary Courses for High School Credit

- | | |
|---------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Health Science |
| Level 2 | <ul style="list-style-type: none"> Medical Terminology |
| Level 3 | <ul style="list-style-type: none"> Health Science Theory (Required) Anatomy and Physiology (Recommended) |
| Level 4 | <ul style="list-style-type: none"> Practicum in Health Science (Required) Medical Microbiology (Recommended) |

Aligned Advanced Academic Courses

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

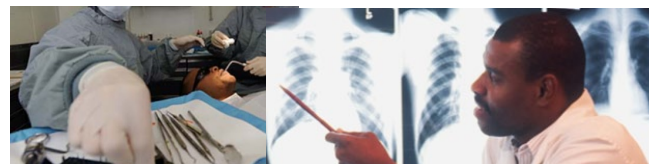
- Intern with a medical assistant at a community clinic, hospital, assisted living, or long-term care facility
- Participate in job shadowing experiences such as Emergency Medical Services (EMS) ride along or hospital/clinical job

Expanded Learning Opportunities

- Participate in Health Occupation Students of America (HOSA) or SkillsUSA
- Participate in Advanced Medical Ambulance Bus (AMBUS) event or Community Emergency Response Team (CERT) event

Aligned Industry-Based Certifications

- Pharmacy Technician



Example Postsecondary Opportunities

Apprenticeships

- Medical Assistant

Associate Degrees

- Pharmacy Technician

Bachelor's Degrees

- Pharmacology

Master's, Doctoral, and Professional Degrees

- Medicine
- Pharmacist



Example Aligned Occupations

Pharmacy Technician

Median Wage: \$39,054
Annual Openings: 43,400
10-Year Growth: 8%

Pharmacist

Median Wage: \$123,814
Annual Openings: 1,260
10-Year Growth: 5%

Physician Assistants

Median Wage: \$127,332
Annual Openings: 974
10-Year Growth: 41%

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/programs-of-study-additional-resources>



Health Science Career Cluster

Statewide Program of Study: *Health Science- Pharmacology*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Health Science 13020200 (1 credit)	Prerequisites: None Corequisites: None	7735
<p>This is the first of a sequence of courses offered in the Health Science Technology Career Tech Program, which prepares the student for a career as a health care professional. Students will learn leadership skills, safety skills in health care setting, health care systems, Anatomy and physiology, professionalism, overview of careers in the health care field, as well as Life stages. Students will be certified with health care provider CPR as well.</p>		

Level 2

Course	Prerequisites Corequisites	Local Course #
Medical Terminology 13020300 (1 credit)	Prerequisites: Principles of Health Science, Biology or IPC Corequisites: None	7745
<p>This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.</p>		

Level 3

Course	Prerequisites Corequisites	Local Course #
Health Science Theory 13020400 (1 credit)	Prerequisites: One credit in Biology and at least one credit in a course from the Health Science career cluster Recommended Corequisites: Anatomy and Physiology	7829
<p>The Health Science Theory course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers. Students will employ hands-on experiences for continued knowledge and skill development.</p>		
Anatomy and Physiology 13020600 (1 credit)	Prerequisites: One credit in Biology and one credit in Chemistry, Integrated Physics and Chemistry, or Physics Recommended Corequisites: Health Science Theory and Clinicals *Weighted Credit	7742
<p>Students conduct field and laboratory investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem-solving. Topics will be presented through the integration of biology, chemistry, and physics. Students will study the structures and functions of the human body and body systems. Students will investigate the body's responses to forces, maintenance of homeostasis, electrical interactions, transport systems, and energy systems. Outside research will be required. This course will satisfy the 3rd or 4th Science graduation requirement.</p>		

For additional information on the **Health Science** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Health Science Career Cluster

Statewide Program of Study: *Health Science- Pharmacology*

Course Information

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Health Science- Pharmacology 13020500 (2 credits)	Prerequisites: Health Science Theory and 3 Science credits including Biology Recommended Corequisites: Medical Microbiology	7833
<p>This Level three course is an occupation specific course designed to provide knowledge and skills for postsecondary education in health careers. Students develop advanced clinical skills needed for employment in the health care industry. Six hours each week are in a pharmacy clinical experience in a health care community setting and three hours each week are in the classroom. The classroom phase will include learning medications, federal law requirements, patient safety and quality assurance, and order entry processing. **Students must have own transportation for this course. ** Uniforms are required and are worn during clinical rotations and field trips. There will be fees associated with this program.</p>		
Medical Microbiology 13020700 (1 credit)	Prerequisites: Biology and Chemistry Recommended Corequisites: Practicum in Health Science	7715
<p>The Medical Microbiology course is designed to explore the microbial world, studying topics such as pathogenic and non-pathogenic microorganisms, laboratory procedures, identifying microorganisms, drug resistant organisms, and emerging diseases. Students must meet the 40% laboratory and fieldwork requirement. This course satisfies a high school science graduation requirement.</p>		

For additional information on the **Health Science** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Hospitality and Tourism Career Cluster

The Hospitality and Tourism career cluster focuses on the management, marketing, and operations of restaurants, lodging, attractions, recreation events, and travel-related services. This career cluster includes occupations ranging from reservation and transportation ticket agent to event planner and general manager.

Statewide Program of Study: **Culinary Arts**

The Culinary Arts program of study focuses on occupational and educational opportunities associated with the planning, directing, or coordinating activities of a food and beverage organization or department. This program of study includes opportunities involved in directing and participating in the preparation of food.

Offered to: LMHS and TCHS



Secondary Courses for High School Credit

- | | |
|----------------|---|
| Level 1 | <ul style="list-style-type: none"> Business Information Management I (<i>This course is required for a Technology Credit but is not included as a program of study course</i>) |
| Level 2 | <ul style="list-style-type: none"> Culinary Arts |
| Level 3 | <ul style="list-style-type: none"> Advanced Culinary Arts |
| Level 4 | <ul style="list-style-type: none"> Practicum in Culinary Arts |

Aligned Advanced Academic Courses

Dual Credit	Dual credit offerings will vary by local educational agency.
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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 director of a non-profit that produces and delivers food for communities in need
- Intern at a catering company and learn about food production for large-scale events
- Work part-time in a restaurant as a line cook or chef

Expanded Learning Opportunities

- Participate in FCCLA
- Participate in SkillsUSA
- Participate in American Culinary Association or the Texas Restaurant Association

Aligned Industry-Based Certifications

- ServSafe Manager



Example Postsecondary Opportunities

Associate Degrees

- Culinary Arts
- Baking and Pastry Arts

Bachelor's Degrees

- Hotel/Motel Administration/Management
- Culinary Science

Master's, Doctoral, and Professional Degrees

- Organizational Leadership
- Foodservice Systems Administration/Management

Additional Stackable IBCs/License

- Food Manager License



Example Aligned Occupations

Bakers

Median Wage: \$29,466
Annual Openings: 2,942
10-Year Growth: 26%

Chefs and Head Cooks

Median Wage: \$44,761
Annual Openings: 950
10-Year Growth: 37%

General and Operations Managers

Median Wage: \$83,220
Annual Openings: 25,450
10-Year Growth: 23%

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/programs-of-study-additional-resources>



Hospitality and Tourism Career Cluster

Statewide Program of Study: **Culinary Arts**

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
--------	------------------------------	----------------

Business Information Management I
13011400 (1 credit)

Prerequisites: None
Corequisites: None
***This course is required for a technology credit but is not included as a program of study course.**

7767

In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

Level 2

Course	Prerequisites Corequisites	Local Course #
--------	------------------------------	----------------

Culinary Arts
13022600 (2 credits)

Prerequisites: None
Corequisites: None

7713

Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification, a Texas culinary specialist certification, or any other appropriate industry certification. This course may be offered as a laboratory-based or internship course.

Level 3

Course	Prerequisites Corequisites	Local Course #
--------	------------------------------	----------------

Advanced Culinary Arts
13022650 (2 credits)

Prerequisites: Culinary Arts
Corequisites: None

7717

Advanced Culinary Arts will extend content and enhance skills introduced in Culinary Arts by in-depth instruction of industry-driven standards to prepare students for success in higher education, certifications, and/or immediate employment.

Level 4

Course	Prerequisites Corequisites	Local Course #
--------	------------------------------	----------------

Practicum in Culinary Arts
13022700 (2 credits)

Prerequisites: Advanced Culinary Arts
Corequisites: None

7810

Practicum in Culinary Arts is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing culinary art-based workplace.

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



Hospitality and Tourism Career Cluster

The Hospitality and Tourism career cluster focuses on the management, marketing, and operations of restaurants, lodging, attractions, recreation events, and travel-related services. This career cluster includes occupations ranging from reservation and transportation ticket agent to event planner and general manager.

Statewide Program of Study: *Hospitality and Tourism*

The Hospitality and Tourism program of study focuses on occupational and educational opportunities associated with the logistical and operational management of lodging and resorts. This program of study addresses human resources, financial analysis, and marketing.

Offered to: TCHS

Secondary Courses for High School Credit

- | | |
|----------------|---|
| Level 1 | • Principles of Hospitality and Tourism |
| Level 2 | • Hotel Management |
| Level 3 | • Hospitality Services |
| Level 4 | • Practicum in Hospitality Services |

Aligned Advanced Academic Courses

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

- Intern at a resort to learn about customer service and lodging management
- Work part-time at a theme park or hotel
- Shadow an event planner at a local convention center

Expanded Learning Opportunities

- Participate in FCCLA
- Participate in SkillsUSA
- Participate in DECA

Aligned Industry-Based Certifications

- NOCTI Travel and Tourism



Example Postsecondary Opportunities

Associate Degrees

- Culinary Arts
- Tourism and Travel Services Management

Bachelor's Degrees

- Hospitality Administration/Management
- Parks, Recreation, and Leisure Facilities Management

Master's, Doctoral, and Professional Degrees

- Organizational Leadership
- Tourism and Travel Services Management

Additional Stackable IBCs/License

- Hospitality and Food Service Management



Example Aligned Occupations

Reservation and Transportation Ticket Agents and Travel Clerks

Median Wage: \$48,000
Annual Openings: 2,031
10-Year Growth: 17%

Meeting, Convention, and Event Planners

Median Wage: \$49,428
Annual Openings: 1,070
10-Year Growth: 25%

General Operations Managers

Median Wage: \$83,220
Annual Openings: 25,450
10-Year Growth: 23%

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/programs-of-study-additional-resources>



Hospitality and Tourism Career Cluster

Statewide Program of Study: **Hospitality and Tourism**

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Hospitality and Tourism 13022200 (1 credit)	Prerequisites: None Corequisites: None	7800

The hospitality and tourism industry encompasses lodging; travel and tourism; recreation, amusements, attractions, and resorts; and restaurants and food beverage service. The hospitality and tourism industry maintains the largest national employment base in the private sector. Students use knowledge and skills that meet industry standards to function effectively in various positions within this multifaceted industry.

Level 2

Course	Prerequisites Corequisites	Local Course #
Hotel Management 13022300 (1 credit)	Prerequisites: Principles of Hospitality and Tourism Corequisites: None	7811

Hotel Management focuses on the knowledge and skills needed to pursue staff and management positions available in the hotel industry. This in-depth study of the lodging industry includes departments within a hotel such as front desk, food and beverage, housekeeping, maintenance, human resources, and accounting. This course will focus on, but not be limited to, professional communication, leadership, management, human resources, technology, and accounting.

Level 3

Course	Prerequisites Corequisites	Local Course #
Hospitality Services 13022800 (2 credits)	Prerequisites: Hotel Management Corequisites: None	7701

The hospitality and tourism industry encompasses lodging; travel and tourism; recreation, amusements, attractions, and resorts; restaurants and food/beverage services. The hospitality and tourism industry maintains the largest national employment base in the private sector. Students use knowledge and skills that meet industry standards to function effectively in various positions within this multifaceted industry. Hospitality Services provides students with preparation to pursue high-demand and high-skill careers in hospitality related industries.

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Hospitality Services 13022900 (2 credits)	Prerequisites: Hospitality Services Corequisites: None	7705

Practicum in Hospitality Services is a unique practicum experience to provide opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Hospitality Services integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing culinary art based workplace. Students are taught employability skills, including job-specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Practicum in Hospitality Services is relevant and rigorous, supports student attainment of academic and technical standards, and effectively prepares students for college and career success.

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



Human Services Career Cluster

The Human Services career cluster focuses on preparing individuals for employment in career pathways that relate to families and human needs, such as counseling and mental health services, family and community services, personal care services, and consumer services. This career cluster includes occupations ranging from community health workers to cosmetologists and nutritionists.

Regional Program of Study: **Barbering**

Approved Regional Program of Study

**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 Cosmetology and Personal Care Services regional program of study focuses on occupational and educational opportunities associated with providing beauty and personal care services. This program of study includes managing personal care facilities and coordinating or supervising personal service workers.

Offered to: LMHS

Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> Business Information Management I (This course is required for a Technology Credit but is not included as a program of study course)
Level 2	<ul style="list-style-type: none"> Introduction to Barbering
Level 3	<ul style="list-style-type: none"> Barbering I
Level 4	<ul style="list-style-type: none"> Barbering II

Aligned Advanced Academic Courses

Dual Credit Dual credit offerings will vary by local educational 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	<ul style="list-style-type: none"> Work part-time in a salon, spa, or barbershop Participate in an apprenticeship at a salon to become an apprentice stylist
Expanded Learning Opportunities	<ul style="list-style-type: none"> Tour a salon, spa, or barbershop Participate in SkillsUSA

Aligned Industry-Based Certifications

- Barbering Operator License



Example Postsecondary Opportunities

Apprenticeships

- Apprentice Stylist

Associate Degrees

- Cosmetology Operator
- Class A Barber
- Esthetics and Skin Care

Additional Stackable IBCs/License

- Eyelash Extension Specialist
- Hair Weaving Specialist

Example Aligned Occupations

Hairstylists, Barbers and Cosmetologists

Median Wage: \$48,750
Annual Openings: 8,014
10-Year Growth: 25%

Skincare Specialists

Median Wage: \$35,112
Annual Openings: 778
10-Year Growth: 38%

First-Line Supervisors of Personal Service Workers

Median Wage: \$36,795
Annual Openings: 2,253
10-Year Growth: 29%

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/programs-of-study-additional-resources>



Human Services Career Cluster

Regional Program of Study: *Barbering*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Business Information Management I 13011400 (1 credit)	Prerequisites: None Corequisites: None *This course is required for a technology credit but is not included as a program of study course.	7767

In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

Level 2

Course	Prerequisites Corequisites	Local Course #
Introduction to Barbering 13025100 (1 credit)	Prerequisites: None Corequisites: None	7886

In Introduction to Barbering, students explore careers in the cosmetology industry. To prepare for success, students must have academic and technical knowledge and skills relative to the industry. Students may begin to earn hours toward state licensing requirements. Students will be required to purchase the TDLR permit and a small fee for supplies.

Level 3

Course	Prerequisites Corequisites	Local Course #
Barbering I N1302534 (3 credits)	Prerequisites: Introduction to Barbering Corequisites: None	7887

Barbering is an extended course of study that enables students to become licensed barbers through Texas Department of Licensing and Regulation (TDLR). Barbering is one program of study that allows students to earn an industry certificate that launches them into a professional career immediately, yet also specifies rigorous core curricula that prepares the student to be successful in a post-secondary learning environment. There is a fee for this class and it is recommended to let your counselor know in the 9th grade if you plan to enroll in this class.

Level 4

Course	Prerequisites Corequisites	Local Course #
Barbering II N1302535 (3 credits)	Prerequisites: Barbering I Corequisites: None *Students must have 500 clock hours	7888

Barbering II is a continuation of Barbering I. Students are taught employability skills and work on clients in a real salon setting. Upon completion of the program requirements and meeting the required hours, students will be given the opportunity to take the state board licensure examination. The school will pay for the students to take their exam. A \$60.00 deposit is required from the student and will be returned when the student takes the exam. Licensed students can go directly in a salon for employability. Advanced technical classes are offered to students to better prepare them for employability. Students are required to pay for the following: Advanced class-price of products for class.

For additional information on the Human Services career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Human Services Career Cluster

The Human Services career cluster focuses on preparing individuals for employment in career pathways that relate to families and human needs, such as counseling and mental health services, family and community services, personal care services, and consumer services. This career cluster includes occupations ranging from community health workers to cosmetologists and nutritionists.

Regional Program of Study: Cosmetology

Approved Regional Program of Study

**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 Cosmetology and Personal Care Services regional program of study focuses on occupational and educational opportunities associated with providing beauty and personal care services. This program of study includes managing personal care facilities and coordinating or supervising personal service workers.

Offered to: LMHS and TCHS

Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> Business Information Management I (<i>This course is required for a Technology Credit but is not included as a program of study course</i>)
Level 2	<ul style="list-style-type: none"> Introduction to Cosmetology
Level 3	<ul style="list-style-type: none"> Cosmetology I/Lab
Level 4	<ul style="list-style-type: none"> Cosmetology II/Lab

Aligned Advanced Academic Courses

Dual Credit Dual credit offerings will vary by local educational 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	<ul style="list-style-type: none"> Work part-time in a salon, spa, or barbershop Participate in an apprenticeship at a salon to become an apprentice stylist
Expanded Learning Opportunities	<ul style="list-style-type: none"> Tour a salon, spa, or barbershop Participate in SkillsUSA

Aligned Industry-Based Certifications

- Cosmetology Operator License



Example Postsecondary Opportunities

Apprenticeships

- Apprentice Stylist

Associate Degrees

- Cosmetology Operator
- Esthetics and Skin Care

Additional Stackable IBCs/License

- Class A Barber
- Eyelash Extension Specialist
- Hair Weaving Specialist

Example Aligned Occupations

Hairdressers, Hairstylists, and Cosmetologists

Median Wage: \$48,750
Annual Openings: 8,014
10-Year Growth: 25%

Skincare Specialists

Median Wage: \$35,112
Annual Openings: 778
10-Year Growth: 38%

First-Line Supervisors of Personal Service Workers

Median Wage: \$36,795
Annual Openings: 2,253
10-Year Growth: 29%

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/programs-of-study-additional-resources>



Human Services Career Cluster

Regional Program of Study: *Cosmetology*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Business Information Management I 13011400 (1 credit)	Prerequisites: None Corequisites: None *This course is required for a technology credit but is not included as a program of study course.	7767

In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.

Level 2

Course	Prerequisites Corequisites	Local Course #
Introduction to Cosmetology 13025100 (1 credit)	Prerequisites: None Corequisites: None	7780

In Introduction to Cosmetology, students explore careers in the cosmetology industry. To prepare for success, students must have academic and technical knowledge and skills relative to the industry. Students may begin to earn hours toward state licensing requirements. Students will be required to purchase the TDLR permit and a small fee for supplies.

Level 3

Course	Prerequisites Corequisites	Local Course #
Cosmetology I/Lab 13025210 (3 credits)	Prerequisites: Introduction to Cosmetology Corequisites: None	7781

Cosmetology I is the first phase of a two-year program. Students are trained in all phases of Cosmetology. This class prepares students to take a state exam so they can earn a Cosmetology license. Students are required to sign up and be approved for the class and attend a parent meeting. There is a fee for this class and it is recommended to let your counselor know in the 9th grade if you plan to enroll in this class.

Level 4

Course	Prerequisites Corequisites	Local Course #
Cosmetology II/ Lab 13025310 (3 credits)	Prerequisites: Cosmetology I/Lab Corequisites: None *Students must have 500 clock hours	7782

Cosmetology II is a continuation of Cosmetology I. Students are taught employability skills and work on clients in a real salon setting. Upon completion of the program requirements and meeting the required hours, students will be given the opportunity to take the state board licensure examination. The school will pay for the students to take their exam. A \$60.00 deposit is required from the student and will be returned when the student takes the exam. Licensed students can go directly in a salon for employability. Advanced technical classes are offered to students to better prepare them for employability. Students are required to pay for the following: Advanced class-price of products for class.

For additional information on the Human Services career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Information Technology Career Cluster

The Information Technology (IT) career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from Software Developer and Programmer to Cybersecurity Specialists and Network Analysts.

Statewide Program of Study: Networking Systems

The Networking Systems program of study focuses on occupations and educational opportunities associated with designing and implementing computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. This program of study includes analysis of data processing challenges to implementing and improving computer systems.

Offered at: TCHS



Secondary Courses for High School Credit

- | | |
|----------------|--|
| Level 1 | • Principles of Information Technology |
| Level 2 | • Computer Maintenance |
| Level 3 | • Networking |
| Level 4 | • Practicum in Information Technology |

Aligned Advanced Academic Courses

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

- Intern at a local education, public service, or technology organization to develop skills in installing hardware and software
- Interview a network administrator to learn about their career path and what credentials they earned to be successful in their role

Expanded Learning Opportunities

- Participate in a Hackathon
- Participate in SkillsUSA or TSA

Aligned Industry-Based Certifications

- | | |
|---|---|
| <ul style="list-style-type: none"> • Cisco 100-490 RSTech Supporting Cisco Routing and Switching Network Devices • Cisco CCNA (200-301) Implementing and Administering Cisco Solutions • CompTIA A+ Certification • CompTIA IT Fundamentals+ • CompTIA Network+ • CompTIA Server+ • Computer Networking Fundamentals - Job Ready | <ul style="list-style-type: none"> • Google Cloud Certified Professional - Cloud Architect • Information Technology Specialist: Networking • Microsoft 365 Fundamentals • Microsoft Azure Data Fundamentals • Microsoft Security, Compliance, and Identity Fundamentals • Cloud Essentials+ • CompTIA Linux+ • Cybersecurity Fundamentals |
|---|---|



Example Postsecondary Opportunities

Apprenticeships

- Network Engineer Apprenticeship

Associate Degrees

- Computer Systems Networking and Telecommunications
- Network and System Administration

Bachelor's Degrees

- Computer and Information Sciences
- Information Technology

Master's, Doctoral, and Professional Degrees

- Computer Science
- Information Technology

Additional Stackable IBCs/License

- Aruba Certified Mobility Associate (ACMA)



Example Aligned Occupations

Computer Network Support Specialists

Median Wage: \$65,646
Annual Openings: 1,634
10-Year Growth: 19%

Computer Systems Analysts

Median Wage: \$101,716
Annual Openings: 4,985
10-Year Growth: 19%

Network and Computer Systems Administrators

Median Wage: \$85,375
Annual Openings: 2,900
10-Year Growth: 20%

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/programs-of-study-additional-resources>



Information Technology Career Cluster

Statewide Program of Study: Networking Systems

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Information Technology 13027200 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	7916

In Principles of Information Technology, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

Level 2

Course	Prerequisites Corequisites	Local Course #
Computer Maintenance 13027300 (1 credit)	Prerequisites: : Principles of Information Technology Corequisites: None *New for 2026-2027	7917

In Computer Maintenance, students will acquire knowledge of computer maintenance and creating appropriate documentation. Students will analyze the social responsibility of business and industry regarding the significant issues relating to the environment, ethics, health, safety, and diversity in society and in the workplace as related to computer maintenance. Students will apply technical skills to address the IT industry and emerging technologies.

Level 3

Course	Prerequisites Corequisites	Career Clusters
Networking 13027400 (1 credit)	Prerequisites: Computer Maintenance Corequisites: None *New for 2027-2028	7918

In Networking, students will develop knowledge of the concepts and skills related to data networking technologies and practices in order to apply them to personal or career development. To prepare for success, students will have opportunities to reinforce, apply, and transfer knowledge and skills to a variety of settings and problems.

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Information Technology 13028000 (2 credits)	Prerequisites: Networking Corequisites: None *New for 2028-2029	7919

In the Practicum in Information Technology, students will gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems. Knowledge and skills in the proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society. Critical thinking, IT experience, and product development may be conducted in a classroom setting with an industry mentor, as an unpaid or paid internship, as part of a capstone project, or as career preparation.

For additional information on the **Information Technology** career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Law and Public Service Career Cluster

The Law and Public Service career cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. This career cluster includes occupations ranging from police officer and firefighter to political scientist and lawyer.

Statewide Program of Study: Fire Science

The Fire Science program of study focuses on occupational and educational opportunities associated with fire prevention, protection, and firefighting. This program of study includes firefighter safety, building codes, and the necessary physical skills to perform rescues. Students will learn about preparedness, basic fire suppression techniques, basic arson investigation, hazardous material management, and educating the public about fire safety.

Offered to: LMHS and TCHS



Secondary Courses for High School Credit

- | | |
|---------|-------------------------------------|
| Level 1 | • Principles of Fire |
| Level 2 | • Medical Terminology (Dual Credit) |
| Level 3 | • Firefighter I (Dual Credit) |
| Level 4 | • Firefighter II (Dual Credit) |

Aligned Advanced Academic Courses

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 | <ul style="list-style-type: none"> Shadow a fire chief to learn about fire department operations and skills needed to be a firefighter Intern with a fire inspection company to learn about building safety, fire prevention, and fire protection |
| Expanded Learning Opportunities | <ul style="list-style-type: none"> Tour a local fire department Participate in SkillsUSA or TSA |

Aligned Industry-Based Certifications

- Emergency Medical Responder
- Basic Structure Fire Protection



Example Postsecondary Opportunities

Apprenticeships

- Fire Apprentice

Associate Degrees

- Emergency Medical Technology
- Fire Protection Technology

Bachelor's Degrees

- Fire Science
- Emergency Health Services

Additional Stackable IBCs/License

- Hazardous Materials Awareness
- Fire Plan Examiner



Example Aligned Occupations

Emergency Medical Technicians

Median Wage: \$34,169
Annual Openings: 1,590
10-Year Growth: 19%

Firefighters

Median Wage: \$52,353
Annual Openings: 2,294
10-Year Growth: 14%

Fire Inspectors and Investigators

Median Wage: \$67,014
Annual Openings: 203
10-Year Growth: 14%

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/programs-of-study-additional-resources>



Law and Public Service Career Cluster

Statewide Program of Study: Fire Science

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Fire 13029200 (1 credit)	Prerequisites: None Corequisites: None *Offered at Industrial Trades Center	7900
<p>Principles of Law, Public Safety, Corrections, and Security introduces students to professions in law enforcement, protective services, corrections, firefighting, and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, protective services, and corrections.</p>		

Level 2

Course	Prerequisites Corequisites	Local Course #
Medical Terminology 13020300 (1 credit)	Prerequisites: Principles of Fire Corequisites: None *Dual Credit Course	7901
<p>This course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.</p>		

Level 3

Course	Prerequisites Corequisites	Local Course #
Firefighter I 13029900 (2 credits)	Prerequisites: Medical Terminology Corequisites: None *Dual Credit Course *Offered at College of the Mainland	7902
<p>Firefighter I introduces students to firefighter safety and development. Students will analyze Texas Commission on Fire Protection rules and regulations, proper incident reporting and records, proper use of personal protective equipment, and the principles of fire safety.</p>		

Level 4

Course	Prerequisites Corequisites	Local Course #
Firefighter II 13030000 (3 credits)	Prerequisites: Firefighter I Corequisites: None *Dual Credit Course *Offered at College of the Mainland *New for 2026-2027	7903
<p>Firefighter II is the second course in a series for students studying firefighter safety and development. Students will understand Texas Commission on Fire Protection rules and regulations, proper incident reporting and records, proper use of personal protective equipment, and the principles of fire safety. Students will demonstrate proper use of fire extinguishers, ground ladders, fire hoses, and water supply apparatus systems.</p>		

For additional information on the Law and Public Service career cluster,
contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Law and Public Service Career Cluster

The Law and Public Service career cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services. This career cluster includes occupations ranging from police officer and firefighter to political scientist and lawyer.

Statewide Program of Study: Law Enforcement

The Law Enforcement program of study focuses on occupational and educational opportunities associated with the development and enforcement of laws by various branches of law enforcement. This program of study includes the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.

Offered to: LMHS and TCHS



Secondary Courses for High School Credit

- | | |
|----------------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Law, Public Safety, Corrections, and Security |
| Level 2 | <ul style="list-style-type: none"> Law Enforcement I |
| Level 3 | <ul style="list-style-type: none"> Law Enforcement II (Required) Forensic Science (Recommended) |
| Level 4 | <ul style="list-style-type: none"> Practicum in Law, Public Safety, Corrections, and Security (Required) Forensic Science II (Recommended TCHS only) |

Aligned Advanced Academic Courses

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 detective to learn about investigations and the role of detectives in law enforcement
- Intern in dispatch at a local law enforcement agency to learn about first responder roles and processes

Expanded Learning Opportunities

- Visit a police department
- Participate in TSA or SkillsUSA

Aligned Industry-Based Certifications

- IAED Emergency Telecommunicator



Example Postsecondary Opportunities

Apprenticeships

- Security Specialist

Associate Degrees

- Criminal Justice
- Law Enforcement

Bachelor's Degrees

- Forensic Science
- Criminal Justice

Master's, Doctoral, and Professional Degrees

- Criminal Justice
- Criminology and Criminal Justice

Additional Stackable IBCs/Licensures

- Jailer – Basic County Corrections
- Basic Telecommunicator



Example Aligned Occupations

Police and Sheriff's Patrol Officers

Median Wage: \$64,373
Annual Openings: 5,424
10-Year Growth: 13%

Detectives and Criminal Investigators

Median Wage: \$82,090
Annual Openings: 1,536
10-Year Growth: 8%

First-Line Supervisors of Police and Detectives

Median Wage: \$97,571
Annual Openings: 5,461
10-Year Growth: 12%

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/programs-of-study-additional-resources>



Law and Public Service Career Cluster

Statewide Program of Study: Law Enforcement

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Law, Public Safety, Corrections, and Security 13029200 (1 credit)	Prerequisites: None Corequisites: None	7834
<p>Principles of Law, Public Safety, Corrections, and Security introduces students to professions in law enforcement, protective services, corrections, firefighting, and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, protective services, and corrections.</p>		

Level 2

Course	Prerequisites Corequisites	Local Course #
Law Enforcement I 13029300 (1 credit)	Prerequisites: Principles of Law, Public Safety, Corrections, and Security Corequisites: None	7835
<p>Law Enforcement I is an overview of the history, organization, and functions of local, state, and federal law enforcement. Students will understand the role of constitutional law at local, state, and federal levels; the U.S. legal system; criminal law; and law enforcement terminology and the classification and elements of crime.</p>		

Level 3

Course	Prerequisites Corequisites	Local Course #
Law Enforcement II 13029400 (1 credit)	Prerequisites: Law Enforcement I Recommended Corequisites: Forensic Science	7836
<p>Law Enforcement II provides the knowledge and skills necessary to prepare for a career in law enforcement. Students will understand ethical and legal responsibilities, patrol procedures, first responder roles, telecommunications, emergency equipment operations, and courtroom testimony.</p>		
Forensic Science 13029500 (1 credit)	Prerequisites: One credit in Biology, one credit in Chemistry, Integrated Chemistry and Physics (IPC), or Physics Recommended Corequisites: Law Enforcement I	7828
<p>This course uses a structured and scientific approach to the investigation of crimes and the psychology of criminal behavior. Students will learn terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes. Students will learn the history, legal aspects, and career options for forensic science. Outside research will be required. Students will be required to maintain a bound composition notebook. This course satisfies a Science credit requirement for the Foundation High School Program.</p>		

For additional information on the Law and Public Service career cluster, contact cte@tea.texas.gov or visit <https://tea.texas.gov/cte>



Law and Public Service Career Cluster

Statewide Program of Study: Law Enforcement

Course Information

Level 4

Course	Prerequisites Corequisites	Local Course #
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Practicum in Law, Public Safety, Corrections, and Security

13030100 (2 credits)

Prerequisites: Law Enforcement II
Recommended Corequisites: Forensic Science II

7837

The practicum course is designed to give students supervised practical application of previously studied knowledge and skills in law, public safety, corrections, and security. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience.

Forensic Science II

13037200 (1 credit)

Prerequisites: Forensic Science I
Recommended Corequisites: Practicum in Law, Public Safety, Corrections, and Security
***TCHS only**

7826

This course is an extension of Forensic Science. Students will take a deeper dive into terminology and investigative procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes. Students will learn the history, legal aspects, and career options for forensic science. Outside research will be required. Students will be required to maintain a bound composition notebook. This course satisfies a Science credit requirement for the Foundation High School Program.

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



Manufacturing Career Cluster

The Manufacturing career cluster focuses on planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and process engineering. This career cluster includes occupations ranging from welder and machinist to industrial engineering technician and semi-conductor processing technician.

Statewide Program of Study: Welding

The Welding Program of Study focuses on the development and use of automatic and computer-controlled machines, tools, and robots that perform work on metal or plastic. CTE learners will learn how to modify parts to make or repair machine tools or maintain individual machines and how to use hand-welding or flame-cutting equipment.

Offered to: LMHS and TCHS at the Industrial Trades Center

Secondary Courses for High School Credit

- | | |
|----------------|---|
| Level 1 | <ul style="list-style-type: none"> Business Information Management I (<i>This course is required for a Technology Credit but is not included as a program of study course</i>) |
| Level 2 | <ul style="list-style-type: none"> Introduction to Welding |
| Level 3 | <ul style="list-style-type: none"> Welding I (Required) Applied Mathematics for Technical Professionals (Recommended) |
| Level 4 | <ul style="list-style-type: none"> Welding II |

Aligned Advanced Academic Courses

Dual Credit Dual credit offerings will vary by local education agency.

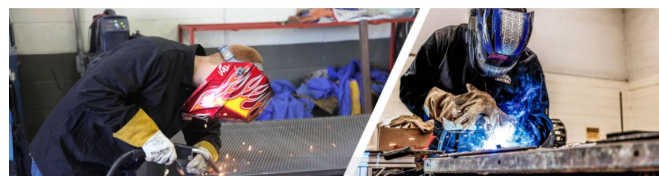
Students should be advised to consider these course opportunities to enrich their preparation. AP or IB courses not listed under the Secondary Courses for High School Credit section of this framework document do not count towards concentrator/completer status for this program of study.

Work-Based Learning and Expanded Learning Opportunities

- | | |
|--|--|
| Work-Based Learning Activities | <ul style="list-style-type: none"> Job shadow a welder Intern for a local welding company |
| Expanded Learning Opportunities | <ul style="list-style-type: none"> Tour a welding shop Participate in Houston Livestock Show and Rodeo ICC Participate in a welding project that benefits the community |

Aligned Industry-Based Certifications

- AWS D1.1 Structural Steel
- AWS D9.1 Sheet Metal Welding
- NCCER Core
- NCCER Welding Level I



Example Postsecondary Opportunities

Apprenticeships

- Welding

Associate Degrees

- Welding Technology
- Building/Construction Site Management
- Operations Management and Supervision

Bachelor's Degrees

- Welding Technology
- Construction Management
- Project Management
- Building/Construction Site Management

Master's, Doctoral, and Professional Degrees

- Engineering
- Engineering/Industrial Management
- Manufacturing Engineering
- Construction Engineering



Example Aligned Occupations

Welders, Cutters, Solderers, and Brazers

Median Wage: \$48,177
Annual Openings: 6,792
10-Year Growth: 23%

First-Line Supervisors of Production and Operating Workers

Median Wage: \$62,584
Annual Openings: 5,926
10-Year Growth: 17%

Industrial Production Managers

Median Wage: \$119,691
Annual Openings: 1,296
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/programs-of-study-additional-resources>



Manufacturing Career Cluster

Statewide Program of Study: *Welding*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Business Information Management I 13011400 (1 credit)	Prerequisites: None Corequisites: None *This course is required for a technology credit but is not included as a program of study course.	7767
In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.		

Level 2

Course	Prerequisites Corequisites	Local Course #
Introduction to Welding 13032250 (1 credit)	Prerequisites: None Corequisites: None Required: Drug testing is mandatory for this course *May be offered at Home Campus	7813
This course provides the student with job skills in the following areas: electric arc welding oxy/acetylene welding and brazing, basic layout and fabrication, and the development of good work habits. It prepares students to pass the entry level welding exams required for employment. Students must furnish appropriate work clothes to be left in the lab. Students will be required to purchase boots.		

Level 3

Course	Prerequisites Corequisites	Local Course #
Welding I 13032300 (2 credits)	Prerequisites: Introduction to Welding Corequisites: None Recommended Corequisite: Applied Mathematics for Technical Professionals Required: Drug testing is mandatory for this course	7785
This course provides the student with job skills in the following areas: electric arc welding, oxy/acetylene welding and brazing, basic layout and fabrication, and the development of good work habits. It prepares students to pass the entry level welding exams required for employment. Students must furnish appropriate work clothes to be left in the lab. Students will be required to purchase boots.		
Applied Mathematics for Technical Professionals 12701410 (1 credit)	Prerequisites: Construction Technology I Corequisites: None Recommended Corequisite: Welding I	7925
Applied Mathematics for Technical Professionals uses problem-solving situations, hands-on activities, and technology to extend mathematical thinking and engage student reasoning. Situations relating to technical applications provide students opportunities to make connections with mathematics and the workplace. In addition, students will learn the skills necessary to communicate using mathematics. Hands-on activities will allow students to model, explore, and develop abstract concepts applicable to technical careers.		

Level 4

Course	Prerequisites Corequisites	Local Course #
Welding II 13032400 (2 credits)	Prerequisites: Welding I Corequisites: None Required: Drug testing is mandatory for this course	7799
This course provides the student with job skills in the following areas: advanced electric arc welding; SMAW, GTAW, and GMAW welding of plate and pipe; advanced layout and fabrication; and development of self-motivated work skills and habits. Students will be required to purchase boots.		

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

Engineering Career Cluster

The Engineering career cluster focuses on planning, designing, testing, building, and maintaining of machines, structures, materials, systems, and processes using empirical evidence and science, technology, and math principles. This career cluster includes occupations ranging from mechanical engineer and drafter to electrical engineer and to mapping technician.

Statewide Program of Study: Robotics and Engineering

The Engineering Foundations program of study focuses on occupational and educational opportunities associated with a wide range of skills applied in the Engineering industry. Students will design, test, and evaluate projects related to engines, machines, and structures. This program of study includes applying scientific, mathematical, and empirical evidence to solve problems through innovation, design, construction, operation, and maintenance of different engineering systems.

Offered to: LMHS and TCHS



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> Principles of Applied Engineering
Level 2	<ul style="list-style-type: none"> Engineering Design and Presentation I
Level 3	<ul style="list-style-type: none"> Robotics I Robotics II
Level 4	<ul style="list-style-type: none"> Practicum in Science, Technology, Engineering, and Mathematics

Aligned Advanced Academic Courses

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	<ul style="list-style-type: none"> Intern at an engineering, robotics, or aerospace company. Visit an engineering firm and shadow multiple types of engineers.
Expanded Learning Opportunities	<ul style="list-style-type: none"> Participate in SkillsUSA or TSA Join a local engineering association and attend meetings.

Aligned Industry-Based Certifications

- Certified SOLIDWORKS Associate (CSWA)
 - Mechanical Design



Example Postsecondary Opportunities

Apprenticeships

- Industrial Engineering Technician Apprenticeship

Associate Degrees

- Manufacturing Engineering Technology/Technician
- Robotics Technology/Technician

Bachelor's Degrees

- Electrical and Electronics Engineering
- Engineering, General

Master's, Doctoral, and Professional Degrees

- Electrical and Electronics Engineering
- Engineering, General

Additional Stackable IBCs/Licensures

- Professional Engineer (PE License)
- Engineer in Training Certification (EIT)



Example Aligned Occupations

Civil Engineering Technologists and Technicians

Median Wage: \$61,138

Annual Openings: 765

10-Year Growth: 11%

Aerospace Engineers

Median Wage: \$115,694

Annual Openings: 483

10-Year Growth: 18%

Mechanical Engineers

Median Wage: \$99,937

Annual Openings: 1,755

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/programs-of-study-additional-resources>

Engineering Career Cluster

Statewide Program of Study: Robotics and Engineering

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Applied Engineering 13036200 (1 credit)	Prerequisites: None Corequisites: None	7823

Principles of Applied Engineering provides an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects.

Level 2

Course	Prerequisites Corequisites	Local Course #
Engineering Design and Presentation I 13036500 (1 credit)	Prerequisites: Principles of Applied Engineering, Algebra I Corequisites: None	7824

Engineering Design and Presentation I is a continuation of knowledge and skills learned in Principles of Applied Engineering. Students enrolled in this course will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas.

Level 3

Course	Prerequisites Corequisites	Local Course #
Robotics I 13037000 (1 credit)	Prerequisites: Engineering Design and Presentation I Corequisites: Robotics II *Offered at STEM Building *Weighted points will be awarded	7820
Robotics II 13037050 (1 credit)	Prerequisites: Engineering Design and Presentation I Corequisites: Robotics I *Offered at STEM Building *Weighted points will be awarded	7821

Robotics I and II uses a competition format to teach scientific method and engineering design. In the fall and early spring, students enrolled in this course prepare for VEX robotics competitions by designing, building, and programming a robot that can complete specified tasks. Students use a variety of tools to build the robot and must document their work with an array of computer skills including, but not limited to, Word, PowerPoint, and RobotC. Tasks change from year to year and students may take this course more than once. Students taking this course should expect to attend 3-5 Saturday competition dates, and 2-3 after school shop periods per week during the competition season.

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Science, Technology, Engineering, and Mathematics 13037400 (2 credits)	Prerequisites: Robotics I and II Corequisites: None *Offered at STEM Building *Weighted points will be awarded	7819

This is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous Engineering and Robotics courses. The course is highly customizable to meet local system needs: instruction may be delivered through school laboratory training or through work-based learning arrangements such as internships, cooperative education, service learning, mentoring, and job shadowing. Upon completion of the practicum, students will be prepared for postsecondary study in engineering and robotics fields. Students taking this course should expect to attend 3-5 Saturday competition dates, and 2-3 after school shop periods per week during the competition season.

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



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 Regional Program of Study

*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.

Offered to: LMHS and TCHS at the Industrial Trades Center



Secondary Courses for High School Credit

- | | |
|----------------|--|
| Level 1 | <ul style="list-style-type: none"> Principles of Maritime Science |
| Level 2 | <ul style="list-style-type: none"> Introduction to Shipboard Engineering Maritime Science I |
| Level 3 | <ul style="list-style-type: none"> Maritime Science II (Required) Advanced Shipboard Engineering (Required) Applied Mathematics for Technical Professionals (Recommended) |
| Level 4 | <ul style="list-style-type: none"> Practicum in Distribution and Logistics |

Aligned Advanced Academic Courses

Dual Credit	Dual credit offerings will vary by local education agency.
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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 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)



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

Sailors and Marine Oilers

Median Wage: \$69,299
Annual Openings: 329
10-Year Growth: 10%

Motorboat Operators

Median Wage: \$40,223
Annual Openings: 83
10-Year Growth: 14%

Captains, Mates, and Pilots of Water Vessels

Median Wage: \$102,803
Annual Openings: 293
10-Year Growth: 13%

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/programs-of-study-additional-resources>



Transportation, Distribution, and Logistics Career Cluster

Regional Program of Study: *Maritime*

Course Information

Level 1

Course	Prerequisites Corequisites	Local Course #
Principles of Maritime Science N1304661 (1 credit)	Prerequisites: None Corequisites: None Required: Drug testing is mandatory for this course	7783
This course is designed to instruct students in the principles of maritime science as outlined by the Code of Federal Regulations (CFR) directly related to the National Maritime Center and the Merchant Mariner Credentialing Program.		

Level 2

Course	Prerequisites Corequisites	Local Course #
Introduction to Shipboard Engineering N1304666 (1 credit)	Prerequisites: Principles of Maritime Science Corequisites: Maritime Science I Required: Drug testing is mandatory for this course	7861
Introduction to Shipboard Engineering is designed to provide training for entry-level employment and/or a basis for continuing education in shipboard engineering and merchant mariner credentialing. This course will build on the foundational knowledge previously acquired in the Principles of Maritime Science course. Shipboard engineering includes knowledge of the functions, troubleshooting, maintenance and repair of the systems and components of maritime engines such as centrifuge engines, outboards, and portable dewatering pumps. In addition, students will receive instruction in safety, emergency procedures, and shipboard auxiliary systems.		
Maritime Science I N1304662 (1 credit)	Prerequisites: Principles of Maritime Science Corequisites: Introduction to Shipboard Engineering Required: Drug testing is mandatory for this course	7784
This course provides training for entry-level employment and a basis for continuing education in deck and piloting careers and merchant mariner credentialing. This course instructs students in progressing aspects of vessel piloting and navigation, safety of life at sea, voyage planning, shipboard damage control, and marine pollution.		



Transportation, Distribution, and Logistics Career Cluster

Regional Program of Study: *Maritime*

Course Information

Level 3

Course	Prerequisites Corequisites	Local Course #
Maritime Science II N1304663 (1 credit)	Prerequisites: Maritime Science I Corequisites: Advanced Shipboard Engineering Recommended Corequisite: Applied Mathematics for Technical Professionals Required: Drug testing is mandatory for this course	7884
Students will develop new skills such as advanced navigation coordination, collision avoidance, briefing the command, electronic navigation theory, basic, routine and emergency ship handling procedures, and external communications.		
Advanced Shipboard Engineering N1304667 (1 credit)	Prerequisites: Introduction to Shipboard Engineering Corequisites: Maritime Science II Recommended Corequisite: Applied Mathematics for Technical Professionals Required: Drug testing is mandatory for this course	7862
The Advanced Shipboard Engineering course includes advanced knowledge of the function, design, and relationships of the systems and components of propulsion and habitability systems. This course will build on knowledge and skills established in the Principles of Maritime Science and Introduction to Shipboard Engineering courses. This course is designed to provide advanced training for employment, licensures, or post-secondary degree programs in the shipboard engineering industry. Instruction includes functions and components of cooling, fuel, lubricating, electrical, air conditioning and refrigeration, propulsion, and mechanical systems of maritime diesel engines. In addition, the students will receive instruction in safety, engine instruments, and environmental compliance.		
Applied Mathematics for Technical Professionals 12701410 (1 credit)	Prerequisites: Electrical Technology I Corequisites: None Recommended Corequisite: Maritime Science II and Advanced Shipboard Engineering	7925
Applied Mathematics for Technical Professionals uses problem-solving situations, hands-on activities, and technology to extend mathematical thinking and engage student reasoning. Situations relating to technical applications provide students opportunities to make connections with mathematics and the workplace. In addition, students will learn the skills necessary to communicate using mathematics. Hands-on activities will allow students to model, explore, and develop abstract concepts applicable to technical careers.		

Level 4

Course	Prerequisites Corequisites	Local Course #
Practicum in Distribution and Logistics 13040470 (2 credits)	Prerequisites: Maritime Science II, Advanced Shipboard Engineering Corequisites: None Required: Drug testing is mandatory for this course	7885
Practicum in Distribution and Logistics is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experience such as internships, mentorships, independent study, or laboratories. The Practicum can be either school lab based or work based.		

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



TCISD Industrial Trades Center (ITC)

MANDATORY DRUG-TESTING PROGRAM

Because certain student activities offered are “safety sensitive,” and because the use of illegal drugs or alcohol may well pose a significant threat to the health and safety of all students who participate in these activities, the District has determined the need to implement a mandatory random drug-testing program.

The purposes of the drug-testing program are to prevent injury, illness, and harm resulting from the use of illegal and performance-enhancing drugs or alcohol; help enforce a drug-free educational environment; deter student use of illegal and performance-enhancing drugs or alcohol; and educate students regarding the harm caused by the use of illegal and performance-enhancing drugs or alcohol.

The District requires drug testing of any student in grades 9–12 who choose to participate in the District industrial trades center programs.

The District shall provide each parent and student a copy of the drug-testing policy and consent form prior to the student's participation in the covered courses or activities.

The District shall conduct meetings with parents and interested student participants prior to the beginning of the fall semester.

District employees shall explain the drug-testing program, review the policy and consent form, and provide an educational presentation on the harmful effects of drug and alcohol abuse. Student attendance at the orientation meeting is mandatory; however, parent attendance is not required.

Before a student shall be eligible to participate in the specified activities, the student shall be required annually to sign a consent form agreeing to be subject to the rules and procedures of the drug-testing program. If the student is under the age of 18, the student's parent or guardian shall also sign a consent form. If appropriate consent is not given, the student shall not be allowed to participate in the covered activities.

Drug test results shall be used only to determine eligibility and participation in the specified activities. Positive drug test results shall not be used to impose disciplinary sanctions.

Drug test results shall be confidential and shall be disclosed only to the student, the student's parent, and designated District officials who need the information in order to administer the drug-testing program. Drug test results shall not be maintained with a student's academic record. Results shall not be otherwise disclosed except as required by law.

The District shall contract for drug-screening services through an independent laboratory that has met all standards for certification as established by the Substance Abuse and Mental Health Services Administration (SAMHSA), and all testing shall be conducted by qualified laboratory personnel in accordance with accepted practices and procedures established by the contracted laboratory. **See FNF Local**

TCISD Public Notification in Career and Technology

Education Programs

Texas City Independent School District offers career and technical education programs in Agriculture-Food and Natural Resources, Architecture and Construction, Arts-A/V Technology and Communication, Business, Marketing and Finance, Education and Training, Health Science, Hospitality and Tourism, Human Services, Law and Public Service, Manufacturing, Science, Technology, Engineering and Mathematics & Transportation; as well as Distribution and Logistics. Admission to these programs is based on student interest, student needs and grade level requirements set by the Texas Education Agency.

It is the policy of Texas City Independent School District not to discriminate on the basis of race, color, national origin, sex or handicap in its CTE/vocational programs, services or activities and provides equal access to the Boy Scouts and other designated groups as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.

It is the policy of Texas City Independent School District not to discriminate on the basis of race, color, national origin, sex, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended.

Texas City Independent School District will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and CTE programs.

For information about your rights or grievance procedures, contact the Title IX Coordinator, Marcus Higgs, Texas City ISD Assistant Superintendent of Human Resources, 1700 9th Avenue North, Texas City, TX 77590, 409-916-0107 and/or the Section 504 Coordinator, Ruben Pesina, Texas City ISD Director of Special Education, 1700 9th Avenue North, Texas City, TX 77590, 409-916-0106.

TCISD El Publico Notification en la Carrera y la

Educacion de Programas de Tecnologias

Distrito Escolar Independiente de la Ciudad de Texas ofrece programas de educación técnica y vocacional en Agricultura-Alimentos y Recursos Naturales, Arquitectura y Construcción, Tecnología y Comunicación Arts-A / V, Negocios, Mercadotecnia y Finanzas, Educación y Capacitación, Ciencias de la Salud, Hospitalidad y Turismo, Recursos Humanos Servicios, Derecho y Servicio Público, Manufactura, Ciencia, Tecnología, Ingeniería y Matemáticas, así como también Transportación, Distribución y Logística. La admisión a estos programas se basa en necesidades del estudiante y requerimientos de nivel académico impuestos por la Agencia de Educación de Texas.

Es política del Distrito Escolar Independiente de la Ciudad de Texas no discriminar por motivos de raza, color, origen nacional, sexo o discapacidad en sus programas, servicios o actividades vocacionales/CTE y proporciona igualdad de acceso a los Boy Scouts y otros grupos designados como requerido por el Título VI de la Ley de Derechos Civiles de 1964, según enmendada; Título IX de las Enmiendas Educativas de 1972; y Sección 504 de la Ley de Rehabilitación de 1973, según enmendada.

Es política del Distrito Escolar Independiente de la Ciudad de Texas no discriminar en sus procedimientos de empleo por motivos de raza, color, origen nacional, sexo, impedimento o edad, en sus procedimientos de empleo, tal como lo requieren el Título VI de la Ley de Derechos Civiles de 1964, según enmienda; el Título IX de las Enmiendas en la Educación, de 1972, la ley de Discriminación por Edad, de 1975, según enmienda, y la Sección 504 de la Ley de Rehabilitación de 1973, según enmienda.

Distrito Escolar Independiente de la Ciudad de Texas tomará las medidas necesarias para asegurar que la falta de habilidad en el uso del inglés no sea un obstáculo para la admisión y participación en todos los programas educativos y vocacionales.

Para información sobre sus derechos o procedimientos para quejas, comuníquese con el Coordinador del Título IX, Marcus Higgs, Texas City ISD Executive Director of Human Resources, 1700 9th Avenue North, Texas City, TX 77590, 409-916-0107, y/o el Coordinador de la Sección 504, Ruben Pesina, Texas City ISD Director of Special Education, 1700 9th Avenue North, Texas City, TX 77590, 409-916-0106.