



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*

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.



Secondary Courses for High School Credit

Level 1	<ul style="list-style-type: none"> Principles of Architecture Principles of Construction
Level 2	<ul style="list-style-type: none"> Electrical Technology I Entrepreneurship I
Level 3	<ul style="list-style-type: none"> Electrical Technology II
Level 4	<ul style="list-style-type: none"> Practicum in Entrepreneurship Practicum in Entrepreneurship + Extended Practicum in Entrepreneurship Practicum in Construction Technology Practicum in Construction Technology + Extended Practicum in Construction Technology Career Preparation for Programs of Study Career Preparation for Programs of Study + Extended Career Preparation

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Participate in SkillsUSA Participate in trade competitions

Aligned Industry-Based Certifications

- C-200 Certified Industry 4.0 Automation Systems Specialist I - 201 Electrical Systems 1
- Commercial Electrician
- Construction Technology Certification Level I
- Core
- Electrical Apprenticeship Certificate Level I
- Electrical Level I
- Electrical Level II
- Electronic System Technician Level I
- Electronic System Technician Level II
- Fundamentals of Industrial Wiring
- HBI Pre-Apprenticeship Certificate Training (PACT), Basic Electrical
- HBI Pre-Apprenticeship Certificate Training (PACT), Core
- Industrial Technology Maintenance (ITM) - Electrical Systems
- Interim Credential
- Residential Appliance Installer
- Residential Wireman
- TRIO Electrical Pre-Apprenticeship (EPP) Certification



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: \$42,692
Annual Openings: 1,299
10-Year Growth: 20%

Electricians

Median Wage: \$55,891
Annual Openings: 7,798
10-Year Growth: 27%

Construction Managers

Median Wage: \$98,294
Annual Openings: 5,403
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/ac-electrical-extended.pdf>