# **Architecture and Construction Career Cluster**

The Architecture and Construction Career Cluster focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management.

# **Electrical** Statewide Program of Study



The Electrical program of study explores the occupations and educational opportunities associated with installing, maintaining, and repairing electrical wiring, equipment, and fixtures. This program of study may also include exploration into installing and repairing telecommunications cable including fiber optics.

# **Secondary Courses for High School Credit**

#### Level 1

Principles of Construction

#### Level 2

Electrical Technology I

#### Level 3

Electrical Technology II

#### Level 4

- Practicum in Construction Technology
- Career Preparation I

## **Postsecondary Opportunities**

#### Associates Degrees

- Electrician
- Communications Systems Installation and Repair Technology

#### Bachelor's Degrees

Construction Science

#### Master's, Doctoral, and Professional Degrees

Construction Management

# Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities	
<ul> <li>Shadowan electrician orfiber optics line installer</li> <li>Participate in SkillsUSA</li> </ul>	<ul> <li>Intern or shadow an electrician</li> </ul>	
Industry-Based Certifications		

- C-200 Certified Industry 4.0 Automation Systems Specialist I - 201 Electrical Systems 1
- HBI Pre-Apprenticeship Certificate Training (PACT), Basic Electrical
- HBI Pre-Apprenticeship Certificate Training (PACT), Core
- NCCER Commercial Electrician
- NCCER Construction Technology Certification Level I
- NCCER Core
- NCCER Electrical Level I
- NCCER Electrical Level II
- NCCER Electronic System Technician Level I
- NCCER Electronic System Technician Level II
- Certified Electronics Systems As sociate \*
- Electrical Apprenticeship Certificate Level 1\*
- ISCET Certified Electronics Technicians \*
- OSHA 30 Hour Construction\*
- OSHA 30 Hour General\*

#### \*IBC sunsetting 8/31/24

# **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Electrical Linemen	\$54,184	1,314	28%
Electricians	\$44,013	8,460	21%
Electrical and Electronics Installers	\$37,544	245	19%
Security and Fire Alarm Installers	\$43 <i>,</i> 638	1,112	22%
Telecommunication Line Installers and Repairers	\$49,150	1,228	10%

Successful completion of the Electrical program of study will fulfill requirements of the Business and Industry endors ement and STEM endorsement if the math and science requirements are met. Revised – August 2022



# Electrical Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Construction	13004220 (1 credit)	None	None

# Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES (CREQ)
Electrical Technology I	13005600 (1 credit)	None	None

# Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Electrical Technology II	13005700 (2 credits)	Electrical Technology I	None

# Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Construction Technology	13005250 (2 credits) 13005255 (3 credits) 13005260 (2 credits) 13005265 (3 credits)	Construction Technology II; Building Maintenance Technology II; Electrical Technology II; Heating, Ventilation Air Conditioning (HVAC) and Refrigeration Technology II; Plumbing Technology I; or Mill and Cabinetmaking Technology	None
Practicum in Entrepreneurship	N1303425 (2 credits)	None	None
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	None

#### FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER, PLEASE CONTACT: <u>CTE@tea.texas.gov</u> <u>https://tea.texas.gov/cte</u>

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