



# 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: **Construction**

The **Construction** 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.

## Secondary Courses for High School Credit



Grade Level	Courses
9 <sup>th</sup>	<ul style="list-style-type: none"> <li>Principles of Construction</li> </ul>
10 <sup>th</sup>	<ul style="list-style-type: none"> <li>Construction Technology I</li> </ul>
11 <sup>th</sup>	<ul style="list-style-type: none"> <li>Construction Technology II</li> </ul>
12 <sup>th</sup>	<ul style="list-style-type: none"> <li>Practicum in Construction Technology</li> </ul>
<b>Additional Courses Offered</b>	
10 <sup>th</sup> – 12 <sup>th</sup>	<ul style="list-style-type: none"> <li>Electrical Technology I</li> </ul>
11 <sup>th</sup> – 12 <sup>th</sup>	<ul style="list-style-type: none"> <li>Electrical Technology II</li> </ul>

## 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

<b>Work-Based Learning Activities</b>	<ul style="list-style-type: none"> <li>Intern with a carpenter to practice skills such as measuring materials and assembling structures</li> <li>Participate in a pre-apprenticeship that includes activities like installing cabinets, drywall, and siding</li> </ul>
<b>Expanded Learning Opportunities</b>	<ul style="list-style-type: none"> <li>Shadow a construction manager to learn more about how construction teams work together to complete projects</li> <li>Participate in SkillsUSA</li> </ul>

## Aligned Industry-Based Certifications

### IBC's Offered

- 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%

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>