



# 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: *Architecture*

The *Architecture* 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.

### Secondary Courses for High School Credit



Grade Level	Courses
9 <sup>th</sup>	<ul style="list-style-type: none"> <li>Principles of Architecture</li> </ul>
10 <sup>th</sup>	<ul style="list-style-type: none"> <li>Architectural Design I</li> <li>Interior Design I</li> </ul>
11 <sup>th</sup>	<ul style="list-style-type: none"> <li>Architectural Design II</li> <li>Interior Design II</li> </ul>
12 <sup>th</sup>	<ul style="list-style-type: none"> <li>Practicum in Architectural Design</li> </ul>
<b>P-Tech with Dallas College</b>	
10 <sup>th</sup>	<ul style="list-style-type: none"> <li>Architectural Design I</li> </ul>
11 <sup>th</sup>	<ul style="list-style-type: none"> <li>Architectural Design II</li> </ul>
12 <sup>th</sup>	<ul style="list-style-type: none"> <li>Architectural Design II</li> </ul>
<b>Additional Courses Offered</b>	
10 <sup>th</sup> – 11 <sup>th</sup>	<ul style="list-style-type: none"> <li>Interior Design I</li> </ul>
11 <sup>th</sup> – 12 <sup>th</sup>	<ul style="list-style-type: none"> <li>Interior Design 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 at an architectural firm to develop CADD drafting and design technology skills</li> <li>Shadow a civil engineer to learn more about their day-to-day responsibilities</li> </ul>
<b>Expanded Learning Opportunities</b>	<ul style="list-style-type: none"> <li>Conduct an informational interview with an architect to learn about their role and responsibilities</li> <li>Participate in SkillsUSA or TSA</li> </ul>

### Aligned Industry-Based Certifications

#### IBC's Offered

- Autodesk Associate (Certified User) AutoCAD
- Autodesk Associate (Certified User) Revit Architecture



### 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>