



# Architectural Drafting and 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.



## Courses for High School Credit

<b>Level 1</b>	• Principles of Architecture
<b>Level 2</b>	• Architectural Design I
<b>Level 3</b>	• Architectural Design II
<b>Level 4</b>	• Practicum in Architectural Drafting & Design

## Aligned Industry-Based Certifications

- Autodesk Certified Professional in AutoCAD for Design and Drafting
- Autodesk Certified Professional in Revit for Architectural Design

## 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>



Successful completion of the Architectural Drafting and Design program of study will fulfill requirements of the Business and Industry endorsement.

## 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

(Based on statewide employment data)



### 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%



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>



# Architectural Drafting and Design Course Descriptions:

## Principles of Architecture- ACS0120 (1 Credit)

Level: 1 Course Fee: None  
Prerequisites: None GPA Weight: Regular

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.



## Architectural Design I- ACS1020 (1 credit)

Level: 2 Course Fee: None  
Prerequisites: Algebra I and English I GPA Weight: Regular

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 post-secondary degree in architecture, construction science, drafting, interior design, or landscape architecture. Architectural Design I includes 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.

## Architectural Design II- ACS1120 (2 credits)

Level: 3 Course Fee: None  
Prerequisites: Arch. Design I and Geometry GPA Weight: Regular

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.



## Practicum in Architectural Drafting & Design- ACS4000 (2 credits)

Level: 4 Course Fee: None  
Prerequisites: Architectural Design II GPA Weight: Regular

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



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