

# 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.

## Architectural Design Statewide Program of Study



The Architectural Design program of study explores the occupations and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study may also include exploration into collecting and interpreting geographic information, researching and preparing maps, and interior design.

### Secondary Courses for High School Credit

#### Level 1

- Principles of Architecture

#### Level 2

- Architectural Design I
- Interior Design I
- Computer Aided Drafting for Architecture

#### Level 3

- Architectural Design II
- Interior Design II
- Civil Engineering and Architecture (PLTW)

#### Level 4

- Practicum in Architectural Design
- Career Preparation I

### Postsecondary Opportunities

#### Associates Degrees

- Architecture
- Interior Design
- Civil Engineering, General
- Geographic Information Science and Cartography

#### Bachelor's Degrees

- Architecture
- Interior Design
- Civil Engineering, General
- Geographic Information Science and Cartography

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

- Architecture
- Interior Architecture
- Civil Engineering, General
- Geographic Information Science and Cartography

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
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- Shadow an architect, interior designer or civil engineer
- Participate in SkillsUSA
- Intern at an architectural firm

### Industry-Based Certifications

- Autodesk Associate (Certified User) 3ds MAX
- Autodesk Associate (Certified User & Professional) AutoCAD
- Autodesk Associate (Certified User & Professional) Fusion 360
- Autodesk Associate (Certified User) Revit Architecture
- Autodesk Associate (Certified User) Revit for Electrical
- Autodesk Associate (Certified User) Revit for Structural Design
- Autodesk Certified Professional in AutoCAD for Design and Drafting
- Autodesk Certified Professional & Certified User in Civil 3D for Infrastructure Design
- Autodesk Certified Professional in Revit for Architectural Design
- Autodesk Certified Professional in Revit for Electrical Design
- Autodesk Certified Professional in Revit for Structural Design
- Certified SOLIDWORKS Associate (CSWA) - Electrical
- Certified SOLIDWORKS Associate (CSWA) & Professional (CSWP) - Academic
- Certified SOLIDWORKS Professional (CSWP) - Drawing Tools Certified
- Certified SOLIDWORKS Professional (CSWP) - Model Based Definition
- Certified SOLIDWORKS Associate (CSWA) & Professional (CSWP) - Simulation
- Certified SOLIDWORKS Associate (CSWA- Sustainability)
- LEED Green Associate

- Certified SOLIDWORKS Associate\*
- Mastercam Associate Certification\*

\*IBC sunseting 8/31/24

### Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Architects	\$77,043	808	16%
Geographic Information Analysts and Surveyors	\$58,926	162	27%
Architectural/ Civil Drafters	\$50,170	1,068	9%
Construction Managers	\$87,402	2,401	14%

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

# Architectural Design Course Information

## Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Principles of Architecture	13004210 (1 credit)	None	None

## Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Architectural Design I	13004600 (1 credit)	Algebra I and English I	None
Interior Design I	13004300 (1 credit)	Algebra I and English I	None
Computer Aided Drafting for Architecture	N1300429 (1 credit)	None	None

## Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Architectural Design II	13004700 (2 credits)	Architectural Design I or Advanced Interior Design and Geometry	None
Interior Design II	13004400 (2 credits)	English II, Geometry, and Interior Design I	None
Civil Engineering and Architecture (PLTW)	N1303747 (1 credit)	None	None

## Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	COREQUISITES
Practicum in Architectural Design	13004800 (2 credits) 13004805 (3 credits) 13004810 (2 credits) 13004815 (3 credits)	Architectural Design II	None
Career Preparation I	12701300 (2 credits) 12701305 (3 credits)	None	None

FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER,  
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<https://tea.texas.gov/cte>

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