# **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.

# **Architectural Design**





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

#### Level 3

Architectural Design II <sup>1</sup>

#### Level 4

• Practicum in Architectural Design (H)



#### **Postsecondary Opportunities**

#### **Associates Degrees**

- CAD/CADD Drafting and/or 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

### Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul> <li>Participate in SkillsUSA or Technology Student Association (TSA)</li> </ul>	<ul> <li>Intern at an architectural firm</li> <li>Shadow an architect</li> </ul>

#### **Industry-Based Certifications**

- Autodesk Associate (Certified User) AutoCAD <sup>1</sup>
- Autodesk Associate (Certified User) Revit Architecture <sup>1</sup>



# **Aligned Occupations**

Occupations	Median Wage	Annual Openings	% Growth
Architects	\$91,000	1,000	18%
Architectural and Civil Drafters	\$58,300	1,400	16%



# **Architectural Design Course Information**

#### Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE LEVEL(S)
Principles of Architecture	13004210 (1 credit)	None	9

#### Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE LEVEL(S)
Architectural Design I	13004600 (1 credit)	Principles of Architecture, Algebra I & English I	10

#### Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE LEVEL(S)
Architectural Design II	13004700 (2 credits)	Architectural Design I & Geometry	11

#### Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE LEVEL(S)
Practicum in Architectural Design (H)	13004800 (2 credits)	Architectural Design II	12

FOR ADDITIONAL INFORMATION ON THE ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER,
PLEASE CONTACT YOUR CAMPUS CTE COUNSELOR
https://tea.texas.gov/cte

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Further nondiscrimination information can be found at Notification of Nondiscrimination in Career and Technical Education Programs.