



# 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.

## CFISD Program of Study: *Architectural Drafting and Design*

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

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.



### Recommended Course Sequence (credits)(A=advanced)

Students wanting an endorsement in this area must select three (3) or more courses totaling four (4) or more credits with at least one being advanced.

<b>Grade 9</b>	<ul style="list-style-type: none"> <li>Principles of Architecture (1) (*virtual option available)</li> </ul>
<b>Grade 10</b>	<ul style="list-style-type: none"> <li>Architectural Design I (1) (*virtual option available)</li> </ul>
<b>Grade 11</b>	<ul style="list-style-type: none"> <li>Architectural Design II (2) (A) (*virtual option available)</li> </ul>
<b>Grade 12</b>	<ul style="list-style-type: none"> <li>Capstone –Architecture (1) (A)</li> <li>Practicum in Architectural Design (2) (A)</li> </ul>

\*For more information on accessing the virtual options available, refer to the [CFISD Virtual Pathways](https://virtual.cfisd.net) website (<https://virtual.cfisd.net>).

### Aligned Advanced Academic Courses

<b>Workforce Dual Credit</b>	See your counselor or dual credit materials for information on courses leading to an Architectural Design Level I Certificate.
------------------------------	--

### Aligned Industry-Based Certifications Offered in CFISD

(course) (CCMR=impacts “career ready” status as outlined by the TEA Accountability System for College, Career or Military Readiness)

- Autodesk Associate (Certified User) AutoCAD (Architectural Design II) (CCMR)
- Autodesk Associate (Certified User) Revit Architecture (Architectural Design II) (CCMR)

### 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>



### 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

Data Source: Texas Wages, Texas Workforce Commission. rev 3/8/2024

#### Architectural and Civil Drafters

Median Wage: \$58,539  
Annual Openings: 1,579  
10-Year Growth: 15%

#### Architects

Median Wage: \$80,877  
Annual Openings: 650  
10-Year Growth: 18%

#### Construction Managers

Median Wage: \$98,294  
Annual Openings: 5,403  
10-Year Growth: 24%



### AVAILABLE TO STUDENTS AT ALL 12 HIGH SCHOOLS!

- Receive training on industry-standard material, software & equipment.
- Enhance your resume by earning recognized industry-based certifications.
- Get a jump-start by taking advantage of core curriculum dual credit, transferable to 2-yr and 4-yr degrees.

### ALL AT A FRACTION OF THE COST!



For more information on this and other CTE programs of study offered in CFISD, visit <https://www.cfisd.net/academics/career-technical-education/programs-of-study>

What’s next? For more information on related programs available to continue your studies at Lone Star College, visit <https://www.lonestar.edu/programs-of-study>

