

# Architecture & Construction Careers



## About

### Career Description

This field focuses on designing, planning, managing, building and maintaining building structures. People employed in this cluster work on new structures, repairs, restorations, additions, and alterations.

### Industry Description

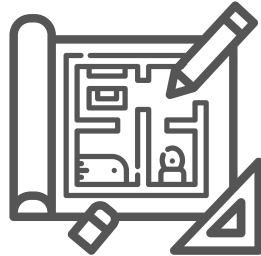
Architecture and construction comprise one of the largest industries in the United States with 13.8 million jobs. The construction industry is divided into three major segments: building construction, heavy and civil engineering construction and specialty trade.

### Skills

Anyone preparing for a career in architecture or construction should have an aptitude for math, problem-solving and design concepts.



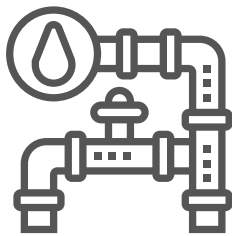
## HIGH SCHOOL CAREER & TECHNICAL EDUCATION



**CTE Pathway:** Interior Design

**Schools:** Smyrna High School

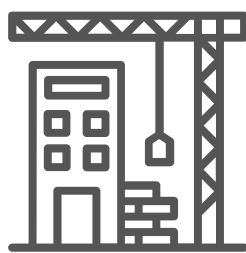
**Description:** This program is designed for students interested in residential or commercial interior design. Content covers elements and principles of design, sketching techniques, computer-aided drafting, board presentation techniques, building technology, building codes, product applications, product testing and project management.



**CTE Pathway:** Mechanical, Electrical & Plumbing Systems (MEP)

**Schools:** Oakland and Rockvale High Schools

**Description:** This program prepares students to install, service, and maintain building equipment. Students are provided with the opportunity to understand the principles behind mechanical, electrical & plumbing systems, apply basic installation skills and safely use and maintain appropriate tools, equipment, and resources to accomplish project goals.



**CTE Pathway:** Residential & Commercial Construction

**Schools:** Oakland High School

**Description:** Students will learn the various construction disciplines to develop a holistic understanding of the building systems and components required for a construction project. Participants will interpret construction drawings, perform math skills, demonstrate the crafts required for each construction project phase and safely use and maintain equipment, and learn resources to accomplish goals.



## RELATED HIGH SCHOOL EXPERIENCES

Career Exploration  
Work-Based Learning

Job Shadowing  
Industry Certification

# Higher Education Opportunities

## CONTINUING YOUR EDUCATION AFTER HIGH SCHOOL



### Training Certifications



**Example Institution:** TCAT

**Estimated Tuition:** \$6,000

**Jobs:** HVAC Technician, Carpenter, Drafting and CAD Technician, Welder, Industrial Maintenance Mechanic

**Estimated Salary Range:** \$34,000 - \$56,000



### Associate's Degree



**Example Institution:** Motlow State Community College

**Estimated Tuition:** \$10,000

**Jobs:** Civil Engineering Technician, Surveying and Mapping Technicians, Mechanical Engineering Technician, Electrical Engineering Technician

**Estimated Salary Range:** \$47,000 - \$65,000



### Bachelor's Degree



**Example Institution:** Middle Tennessee State University

**Estimated Tuition:** \$40,000

**Jobs:** Construction Management, Surveyor, Building Cost Estimator, Construction Superintendent, Project Supervisor

**Estimated Salary Range:** \$50,000 - \$110,000