# Construction Technology

### **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.



Revised-May 2024

### **Endorsement: Business & Industry** Statewide Program of Study: Construction Technology

The Construction Management and Inspection program of study focuses on occupational and educational opportunities associated with producing cost estimates for construction projects to support bidding on or determining the price of products or services. The program of study includes inspecting structures using engineering skills to determine structural soundness and compliance with specifications, building codes, and other regulations.



### **Secondary Courses for High School Credit**

| 9 <sup>th</sup> Grade  | <ul><li>□ Principles of Construction (Level 1) OR</li><li>□ Principles of Architecture (Level 1)</li></ul> |
|------------------------|--|
| 10 <sup>th</sup> Grade | ☐ Construction Technology I (Level 2) (KCC)  |
| 11 <sup>th</sup> Grade | ☐ Construction Technology II (Level 3) (KCC)   |
| 12 <sup>th</sup> Grade | ☐ Practicum in Construction Technology (Level 4) (KCC)   |

A CTE Completer is a student who completes three or more CTE courses for four or more credits including one Level 3 or 4 (advanced level) CTE course within a program of study will fulfill the requirements of a Business and Industry Endorsement.

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

NCCER Core



### **Work-Based Learning and Expanded Learning Opportunities**

Work-Based Learning Activities

- Shadow a construction manager to learn how to lead a team and develop a budget
- Participate in a pre-apprenticeship to clean and prepare construction sites by digging trenches and setting up scaffolding

Expanded Learning Opportunities

- · Shadow a building inspector or cost estimator
- Participate in SkillsUSA

### **NAVIANCE ACCESS**

All Killeen ISD students ( $7^{th} - 12^{th}$  graders) should login to their Naviance account through Clever.

Log into Naviance by clicking the Clever logo or link and use the College SuperMatch Tool to find colleges offering degree plans in this field.







### **Example Postsecondary Opportunities**

### **Apprenticeships**

Building Inspector



### **Associate Degrees**

- Construction Management
- · Construction Engineering Technology
- Building/Property Maintenance
- Building/Construction Site Management

### **Bachelor's Degrees**

- Construction Engineering Technology
- Construction Management
- Building/Property Maintenance

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

- Construction Engineering Technology
- Construction Engineering
- Construction Management
- · Project Management



### **Example Aligned Occupations**

# Construction and Building Inspectors

Median Wage: \$62,251 Annual Openings: 1,585 10-Year Growth: 9%

### First-Line Supervisors of Construction Trades and Extraction Workers

Median Wage: \$64,473 Annual Openings: 9,513 10-Year Growth: 23%

### **Construction Managers**

Median Wage: \$95,072 Annual Openings: 6,325 10-Year Growth: 24%

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



For more information visit: https://tea.texas.gov/academics/college-career-andmilitary-prep/career-and-technical-education/programsof-study-additional-resources

Killeen ISD does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Rhea Bell, Title IX Coordinator, 902 N. 10<sup>th</sup> St., Killeen, TX 76541, 254-336-2822, Rhea.bell@killeenisd.org. Furter nondiscrimination information can be found at Notification of Nondiscrimination in Career and Technical Education Programs.



## **Architecture and Construction Career Cluster**



# Endorsement: Business & Industry Statewide Program of Study: Construction Technology

### **Course Information**

### IT IS IN THE BEST INTEREST OF THE STUDENT TO TAKE ALL COURSES BELOW IN EACH GRADE

Level 1 9<sup>th</sup> Grade

Level 2 10<sup>th</sup> Grade

Level 3 11<sup>th</sup> Grade

Level 4 L2<sup>th</sup> Grade

| IT IS IN THE BEST INTEREST OF THE STUDENT TO TAKE ALL COURSES BELOW IN EACH GRADE |  |                 |  |
|---|--|-----------------|--|
| Course  | Prerequisites   Corequisites   | Career Clusters |  |
| Principles of Construction* 13004220 (1 credit)                                   | Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None  |                 |  |
| Principles of<br>Architecture*<br>13004210 (1 credit)                             | Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None  |                 |  |
| Course  | Prerequisites   Corequisites   | Career Clusters |  |
| Construction Technology I<br>13005100 (2 credits)                                 | Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Construction or Principles of Architecture Recommended Corequisites: None                      |                 |  |
| Course  | Prerequisites   Corequisites   | Career Clusters |  |
| Construction Technology II<br>13005200 (2 credits)                                | Prerequisites: Construction Technology I Corequisites: None Recommended Prerequisites: Principles of Construction or Principles of Architecture Recommended Corequisites: None | i <u>c</u> ,    |  |
| Course  | Prerequisites   Corequisites   | Career Clusters |  |
|   | Prerequisites: Construction Technology II; Building Maintenance Technology II; Electrical Technology II; Heating,  | <u> </u>        |  |

<sup>\*</sup> Indicates course is included in more than one program of study.

# **Armed Forces Career Information**

Recommended Corequisites: None

- Carpentry and Masonry Specialist U.S. Army
- Builder U.S. Navy
- Engineering Specialist U.S. Air Force
- Construction Electrician U.S. Navy
- Structural Specialist U.S. Air Force
- This is not a comprehensive list.

- **Local Armed Forces Recruiter Contact Information:**
- Air Force (254) 247-8992
- Army (254) 690-8554
- Army National Guard (903) 262-6355
- Marines (254) 690-2626
- Navy (254) 690-2096

See your school counselor to connect with a military recruiter for career counseling and to take the ASVAB in high school.