

Level 2

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.

Statewide Program of Study: Construction Management and Inspection

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

Level 1 **Principles of Construction**

Principles of Architecture

Construction Management I

Building Maintenance Technology I

Level 3 Construction Management II

Building Maintenance Technology II

Level 4 Practicum in Construction Management

- Practicum in Construction Management + Extended Practicum in Construction Management
- Practicum in Construction Technology
- Practicum in Construction Technology + Extended **Practicum in Construction Technology**
- Career Preparation for Programs of Study
- Career Preparation for Programs of Study + Extended Career Preparation



Dual credit offerings will vary by local education agency. **Dual Credit**

Students should be advised to consider these course opportunities to enrich their preparation. AP or IB courses not listed under the Secondary Courses for High School Credit section of this framework document do not count towards concentrator/completer status for this program of study.

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

Aligned Industry-Based Certifications

- Certified Associate in Project Management
 NCCER Construction Technology (CAPM)
- HBI Pre-Apprenticeship Certificate Training NCCER Core (PACT), Building Construction Technology • NCCER Weatherization Technician Level I
- HBI Pre-Apprenticeship Certificate Training Residential Plans Examiner R3 (PACT), Core
- LEED Green Associate
- NCCER Construction Site Safety Technician
- Certification Level I



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





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%



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Course Information

Course	Prerequisites Corequisites	Career Clusters
Principles of Construction* 13004220 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Principles of Architecture* 13004210 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

Course	Prerequisites Corequisites	Career Clusters
Construction Management I 13004900 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Algebra I, Geometry, and Principles of Architecture or Principles of Construction Recommended Corequisites: None	i c ,
Building Maintenance Technology I* 13005400 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Architecture or Principles of Construction Recommended Corequisites: None	

Course	Prerequisites Corequisites	Career Clusters
Construction Management II 13005000 (2 credits)	Prerequisites: Construction Management I Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	
Building Maintenance Technology II 13005500 (2 credits)	Prerequisites: Building Maintenance Technology I Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	ie.

^{*} Indicates course is included in more than one program of study.





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Statewide Program of Study: Construction Management and Inspection

Course Information

Course	Prerequisites Corequisites Career Clusters
Practicum in Construction Management First Time Taken: 13006200 (2 credits) Second Time Taken: 13006210 (2 credits)	Prerequisites: Construction Management II Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None
Practicum in Construction Management + Extended Practicum in Construction Management First Time Taken: 13006205 (3 credits) Second Time Taken: 13006215 (3 credits)	Prerequisites: Construction Management II Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None
Practicum in Construction Technology* First Time Taken: 13005250 (2 credits) Second Time Taken: 13005260 (2 credits)	Prerequisites: Construction Technology II, Building Maintenance Technology II; Electrical Technology II; Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology II; Plumbing Technology I; or Mill and Cabinetmaking Technology Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None
Practicum in Construction Technology + Extended Practicum in Construction Technology* First Time Taken: 13005255 (3 credits) Second Time Taken: 13005265 (3 credits)	Prerequisites: Construction Technology II, Building Maintenance Technology II; Electrical Technology II; Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Technology II; Plumbing Technology I; or Mill and Cabinetmaking Technology Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None
Career Preparation for Programs of Study* First Time Taken: 12701121 (2 credits)	Prerequisites: At least one Level 2 or higher CTE course Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None
Career Preparation for Programs of Study + Extended Career Preparation* First Time Taken: 12701141 (3 credits)	Prerequisites: At least one Level 2 or higher CTE course Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None

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For additional information on the **Architecture and Construction** career cluster, contact cte@tea.texas.gov or visit https://tea.texas.gov/cte