



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 | <ul style="list-style-type: none"> Principles of Architecture Principles of Construction |
| Level 2 | <ul style="list-style-type: none"> Construction Management I Building Maintenance Technology I |
| Level 3 | <ul style="list-style-type: none"> Construction Management II Building Maintenance Technology II |
| Level 4 | <ul style="list-style-type: none"> 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 |

Aligned Advanced Academic Courses

Dual Credit Dual credit offerings will vary by Local Education Agency.

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 toward 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

Industry-Based Certifications

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



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



For more information visit:

<https://tea.texas.gov/academics/college-career-and-military-prep/career-and-technical-education/programs-of-study-additional-resources>






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Statewide Program of Study: *Construction Management and Inspection*

Course Information



Level 1

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



Level 2

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	
Building Maintenance Technology I* 13005400 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Architecture or Principles of Construction Recommended Corequisites: None	

Level 3

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	

Level 4

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	

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

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



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Course Information

Level 4

Course	Prerequisites Corequisites	Career Clusters
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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