

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

- **Principles of Construction**
 - Principles of Architecture
- Construction Management I Level 2 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

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



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: \$61,505 Annual Openings: 1,812 10-Year Growth: 9%

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

Median Wage: \$67,645 Annual Openings: 9,193 10-Year Growth: 23%

Construction Managers

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

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



For more information visit:



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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	
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	

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





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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	i 🚉
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	Prerequisites: At least one Level 2 or higher CTE course Corequisites: None	

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Recommended Prerequisites: None

Recommended Corequisites: None



Preparation*

First Time Taken:

12701141 (3 credits)