



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: *Masonry*

The Masonry program of study focuses on occupational and educational opportunities related to laying and binding materials such as brick, structural tile, concrete block, and other types of substances to construct or repair walls and other structures. The program of study includes raising and uniting iron or steel to form completed structures or structural frameworks and building structures using stone.



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"> Masonry Technology I Entrepreneurship |
| Level 3 | <ul style="list-style-type: none"> Masonry Technology II |
| Level 4 | <ul style="list-style-type: none"> Practicum in Masonry Technology Practicum in Masonry Technology + Extended Practicum in Masonry Technology Practicum in Construction Technology Practicum in Construction Technology + Extended Practicum in Construction Technology Practicum in Entrepreneurship Practicum in Entrepreneurship + Extended Practicum in Entrepreneurship 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 educational 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 towards concentrator/completer status for this program of study.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Shadow a tile and stone setter to learn about applying tile to walls, floors, ceilings, countertops, and roof decks
- Participate in a pre-apprenticeship in the masonry industry to develop brick-laying or concrete-finishing skills

Expanded Learning Opportunities

- Participate in SkillsUSA
- Interview a mason to understand their day-to-day experience

Aligned Industry-Based Certifications

- HBI Pre-Apprenticeship Certificate Training (PACT), Brick Masonry
- HBI Pre-Apprenticeship Certificate Training (PACT), Core
- NCCER Construction Technology Certification Level I
- NCCER Core
- NCCER Masonry Level I
- NCCER Masonry Level II



Example Postsecondary Opportunities

Apprenticeships

- Bricklayer

Associate Degrees

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

Bachelor's Degrees

- Engineering Technology
- Construction Management
- Masonry
- Building/Construction Site Management

Master's, Doctoral, and Professional Degrees

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



Example Aligned Occupations

Tile and Stone Setters

Median Wage: \$37,745
Annual Openings: 462
10-Year Growth: 22%

Brickmasons and Blockmasons

Median Wage: \$52,578
Annual Openings: 577
10-Year Growth: 7%

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>



Architecture and Construction Career Cluster

Statewide Program of Study: Masonry

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
Masonry Technology I 13006300 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Construction Recommended Corequisites: None	
Entrepreneurship I* 13011101 (1 credit)	Prerequisites: None Corequisites: None Recommended Prerequisites: Principles of Business, Marketing and Finance Recommended Corequisites: None	

Level 3

Course	Prerequisites Corequisites	Career Clusters
Masonry Technology II 13006400 (2 credits)	Prerequisites: Masonry Technology I Corequisites: None Recommended Prerequisites: None Recommended Corequisites: None	

Level 4

Course	Prerequisites Corequisites	Career Clusters
Practicum in Masonry Technology First Time Taken: 13006450 (2 credits) Second Time Taken: 13006460 (2 credits)	Prerequisites: Masonry Technology 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>



Architecture and Construction Career Cluster

Statewide Program of Study: Masonry

Course Information

Level 4

Course	Prerequisites Corequisites	Career Clusters
Practicum in Masonry Technology + Extended Practicum in Masonry Technology First Time Taken: 13006455 (3 credits) Second Time Taken: 13006465 (3 credits)	Prerequisites: Masonry Technology II Corequisites: Practicum in Masonry Technology 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: Practicum in Construction Technology Recommended Prerequisites: None Recommended Corequisites: None	
Practicum in Entrepreneurship* First Time Taken: 13011111 (2 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Entrepreneurship I and Entrepreneurship II or successful completion of at least two courses in a CTE program of study Recommended Corequisites: None	
Practicum in Entrepreneurship + Extended Practicum in Entrepreneurship* First Time Taken: 13011121 (3 credits)	Prerequisites: None Corequisites: None Recommended Prerequisites: Entrepreneurship I and Entrepreneurship II or successful completion of at least two courses in a CTE program of study Recommended Corequisites: None	

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Statewide Program of Study: Masonry

Course Information

Level 4

Course	Prerequisites Corequisites	Career Clusters
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: Career Preparation for Programs of Study Recommended Prerequisites: None Recommended Corequisites: None	

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