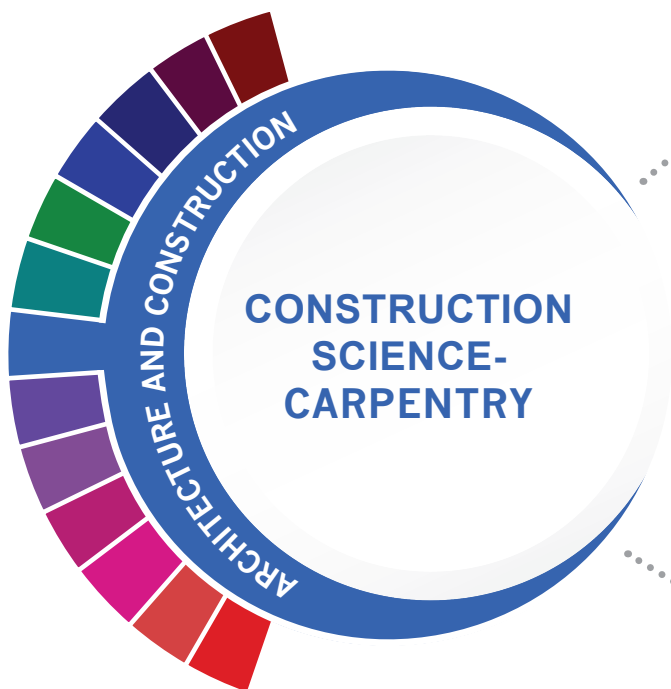


## COURSES



### LEVEL 1

Principles of Construction #8099

### LEVEL 2

Construction Science (Principles of Architecture) #8139

### LEVEL 3

Construction Technology I (2CR) #8111

### LEVEL 4

Construction Technology II (2CR) #8112

AND/OR

Career Preparation I (3CR) #8009

HIGH SCHOOL/INDUSTRY CERTIFICATION	CERTIFICATE/LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/DOCTORAL PROFESSIONAL DEGREE
NCCER Carpentry, Level 1 & 2	Certified Lead Carpenter	Carpentry/ Carpenter	Construction Science	Construction Management
NCCER Commercial Carpenter	Certified Installer	Industrial Mechanics and Maintenance Technology		
NCCER Core Curriculum	Certified Door Consultant			
NCCER Construction Technology	Fluid Power Connector and Conductor			

Additional industry based certification information is available from the TEA CTE website.

For more information on postsecondary options for this program of study, visit [TXCTE.org](http://TXCTE.org).

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Carpenters	\$35,922	5,031	26%
Cost Estimators	\$63,939	2,239	21%

### WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

**Exploration Activities:**  
Shadow a carpenter or millwright.  
SkillUSA

**Work Based Learning Activities:**  
Obtain an NCCER certification in Millwright Level 1 or Carpentry Level 1.

The Carpentry program of study explores the occupations and educational opportunities related to constructing, installing, or repairing structures and fixtures made of wood, such as concrete forms (including frameworks, partitions, joists, studding, rafters, and stairways). This program of study may also include exploration into installing, dismantling, or moving machinery and heavy equipment according to layout plans, blueprints, or other drawings.



The Architecture and Construction Career Cluster® focuses on designing, planning, managing, building, and maintaining the built environment. Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management.

Successful completion of the Carpentry program of study will fulfill requirements of the Business and Industry Endorsement. Approved Statewide Program of Study - September 2019



## Business & Industry Endorsement



### Architecture & Construction

#### Construction Science - Carpentry

(It is recommended students follow the program of study sequence level 1-4 as outlined by TEA.)

##### Principles of Construction (9-10) #8099

Principles of Construction is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. SEM: 2 CR: 1

##### Construction Science - (Principles of Architecture) (10-12) #8139

Principles of Architecture provides an overview to the various fields of architecture, interior design, and construction management. Classroom studies include topics such as safety, work ethics, communication, information technology applications, systems, health, environment, leadership, teamwork, ethical and legal responsibility, employability, and career development and include skills such as problem solving, critical thinking, and reading technical drawings SEM: 2 CR: 1

##### Construction Technology I (10-12) #8111

##### Construction Technology I M (10-12) #8107

Students introduced to safety, tool usage, building materials, codes and framing. Students will develop an understanding of the various educational requirements and career opportunities in construction management, architecture, or engineering. SEM: 2 CR: 2

##### Construction Technology II (11-12) #8112

In addition to skills learned in Construction Technology, students acquire exterior and interior finish out skills. Students gain advanced knowledge and skills specific to those needed to enter the work force as carpenters, building maintenance technicians, or supervisors or prepare for a postsecondary degree in construction management, architecture, or engineering. PR: Construction Technology I SEM: 2 CR: 2

##### Career Preparation (11-12) #8009

Students spend one hour in class each day and a minimum of 15 hours on the job each week. Some of the areas of employment include: clothing and home furnishings, child care, food service, hotel and hospitality services.

##### Extended Career Preparation (11-12)

Provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences.

PR: Successful completion of one or more advanced career and technical education courses that are part of a coherent sequence of courses in a career cluster related to the field in which the student will be employed. SEM: 2 CR: 3