Architectural Design
Business and Industry Endorsement

This Architectural Design program of study explores the occupations and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study may also include exploration into collecting and interpreting geographic information, researching and preparing maps, and interior design.

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Autodesk Certified Professional or User in AutoCAD	Certified Photogrammetric Technologist	Architecture		
Autodesk Certified Professional or User in AutoCAD Civil 3D	Certified Development, Design & Construction Professional	Interior Design		Interior Architecture
Autodesk Certified Professional or User in Autodesk Revit Architecture	National Council Certified Interior Designer	Civil Engineering, General		
Autodesk Certified Professional or User in Autodesk Revit MEP Electrical	LEED AP Building Design & Construction	Geographic Information Science and Cartography		
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.				

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH
Architects	$77,043	808	16%
Geographic Information Analysts and Surveyors	$58,926	162	27%
Architectural/ Civil Drafters	$50,170	1,068	9%
Civil Engineers	$89,960	2,394	12%
Construction Managers	$87,402	2,401	14%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:
Shadow an architect, interior designer, or civil engineer.
SkillsUSA

Work Based Learning Activities:
Intern at an architecture firm.

Courses in this Program of Study

ARCHITECTURAL DESIGN I   Course #   07224310

Recommended Prerequisite: Geometry

Recommended Grade Placement 9-10   **1 CREDIT**

In Architectural Design, students gain knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. Architectural design includes the knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

CIVIL ENGINEERING AND ARCHITECTURE   <mark>Course #</mark>

Recommended Grade Placement 10-11   **1 CREDIT**

Through both individual and collaborative team activities, projects, and problems, students problem solve as they practice common design and development protocols such as project management and peer review. Students develop skill in engineering calculations, technical representation, documentation of design solutions according to accepted technical standards, and use of current 3D architectural design and modeling software to represent and communicate solutions.

ARCHITECTURAL DESIGN II   Course #   07224410

Prerequisite: Architectural Design I and Geometry

Recommended Grade Placement 10-12   **2 CREDITS**

In Architectural Design II, students gain advanced knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. Architectural Design II includes the advanced knowledge of the design, design history, techniques, and tools related to the production of drawings, renderings, and scaled models for commercial or residential architectural purposes.

PRACTICUM IN ARCHITECTURAL DESIGN   Course #   07225810

Prerequisite: Architectural Design II

Recommended Grade Placement 11-12   **2 CREDITS**

This course is an occupationally specific course designed to provide to provide technical instruction in architectural design. Safety and career opportunities are included in addition to work ethics and architectural design study. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency and additional and more advanced knowledge and skills.

CAREER PREPARATION I   Course # 07228902

Recommended Grade Placement 11-12   **2 CREDITS**

Career Preparation I provides opportunities for students to participate in a work-based learning experience that combines classroom instruction with business and industry employment experiences. The goal is to prepare students with a variety of skills for a changing workplace. Career preparation is relevant and rigorous, supports student attainment of academic standards, and effectively prepares students for college and career success.

Program of Study Courses (Prerequisites noted in course descriptions)

To complete the Program of Study, students must earn four credits in the Program of Study and one of the credits must be an Advanced Level course.

Entry Level Courses	Advanced Courses
Architecture Design I	Architectural Design II Civil Engineering and Architecture Practicum in Architectural Design Career Preparation I