



# Drafting and Design Technology

**Career Goal (O\*NET Code):** Architect (17-1011), Civil Engineer (17-2051).

**Cluster Overview:** The Architecture & Construction Cluster focuses on careers in designing, planning, managing, building and maintaining the built environment.

## SUGGESTED COURSEWORK

## EXTENDED LEARNING EXPERIENCES

<b>High School</b>	<b>9th</b>	<b>Core Courses:</b>	English I Algebra I Biology	World Geography Languages other than English I Health/PE or Equivalent	<b>Curricular Experiences:</b> SkillsUSA TSA Family, Career and Community Leaders of America	<b>Extracurricular Experiences:</b> Association of General Contractor Conferences Architectural/Engineering Summer Camps Home Tours Historic Building Tours Student Council  <b>Service Learning Experiences:</b> Habitat for Humanity
		<b>Career-Related Electives:</b>	Introduction to Construction Trades or Drafting I* or Interior Design and Housing or Landscape, Design, Construction and Maintenance or Construction Systems			
	<b>10th</b>	<b>Core Courses:</b>	English II Geometry Chemistry	World History Languages other than English II Technology Applications		
		<b>Career-Related Electives:</b>	Technology Systems (Modular Based Lab)** or Painting and Decorating or Architectural graphics or Architectural Construction or Architectural Drafting I*			
	<b>11th</b>	<b>Core Courses:</b>	English III Algebra II Principles of Technology I	United States History Communication Applications PE or Equivalent	<b>Career Learning Experiences:</b> Career Preparation (Paid/Unpaid): Job Shadowing Internship Apprenticeship	
		<b>Career-Related Electives:</b>	Architectural Drafting II* or Drafting II* or Building Trades I* or Career Preparation I*			
	<b>12th</b>	<b>Core Courses:</b>	English IV Precalculus Engineering	Government/Economics Fine Arts		
		<b>Career-Related Electives:</b>	Architectural Drafting III* or Drafting III* or Building Trades II* or Housing, Furnishing & Equipment Production or Management & Services II or Career Preparation II*			
<b>Postsecondary</b>	<b>On-the-Job Training</b>	Air Conditioning, Heating & Refrigeration Cabinetmaking/Millworking Carpentry	Decorator Design Assistant Construction Trades Drafting/Computer Aided Drafting Electrical Trades	Home Improvement Sales Clerk Masonry Plumbing Sales Clerk - Furnishings/Equipment	<b>Career Options:</b> Drafter Model Builder Renderer  Building Code Official Drafter Model Builder  Cost Estimator Electrical Engineer  Architect Civil Engineer Industrial Designer	<b>Professional Associations:</b> American Institute of Architects American Institute of Contractors Associated Builders and Contractors Associated General Contractors Construction Management Association Design Build Institute of America National Association of Homebuilders Society of Women in Construction Texas Society of Architects
	<b>Certificates</b>	Carpenter Apprenticeship OSHA CareerSafe	North American Technician Excellence Installation Technician National Center for Construction Education Research-Construction Trades	National Occupational Competency Testing Institute-Construction Trades		
	<b>Associate's Degrees</b>	15 hours Core Curriculum Technical Drafting (DFTG 1X05) Basic Computer Aided Drafting (DFTG 1X09) <b>OR</b> Specialized Basic CAD (DFTG 1X10) Descriptive Geometry (DFTG 2X17) <b>* No Licenses, Credentials or Certificates Identified</b>				
<b>Bachelor's Degrees</b>	Architecture Engineering Construction Management	Environmental Design Interior Environmental Design	Urban Planning	Landscape Designer Urban Planner		
<b>Graduate Degrees</b>	Architecture Engineering Consumer Economics	Environmental Design Historic Preservation		Instructor/Professor Preservationist Structural Engineer		

\*May substitute for the required credit for Physical Education  
\*\*Satisfies the required credit for Technology Applications  
\*\*\*May substitute for the required credit for Health Education

Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses, if possible.

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2007. All plans should meet high school graduation requirements as well as college entrance requirements. Students may select other elective courses for personal enrichment purposes.