

Architectural Engineering Technology

Architectural Engineering

www.dtcc.edu • Delaware Technical & Community College

The Architectural Engineering Technology prepares you with skill and experience to guide you through the initial design of a structure to construction and project completion. You will find this program valuable if you want to design, sketch, and draft construction plans; estimate materials and costs for projects; work with computer-aided drafting (CAD); draft commercial and residential buildings; or become specialized in the drafting of structural, material, or site plans.

What You'll Learn...

- Solving problems in a logical, systematic way
- Drafting to industry standards and how to use computer-aided drafting
- Reading and interpreting construction drawings
- Reviewing drawings for accuracy, clarity of information and quantities of materials
- Performing standard tests and inspections on various materials
- Interpreting and applying reference and technical information
- Preparing estimates from plans, contracts, and specifications

What You'll Earn...

- A competitive salary with excellent opportunities for advancement
- Employment opportunities in offices of architects; with contractors and developers; with municipal, state, and federal regulating agencies; or building materials suppliers and handlers
- The opportunity to broaden and advance your skills in new areas
- The credentials to advance to a position as a lead designer

Why You'll Succeed...

- Many of the higher paying jobs, now and in the future, will be in a technical career field requiring an education beyond high school
- Employees with degrees tend to be more eligible for promotion*
- Associate degree holders generally earn more than high school graduates*
- College credit may be awarded for relevant work experience
- Many credits from an Associate Degree may be applied toward a Bachelor Degree

**Statistics from U.S. Department of Commerce, Bureau of Census*

Architectural Engineering

You can enroll in the Architectural Engineering Technology on either a full-time or part-time basis. The length of time required to complete an Associate Degree depends on the number of courses you take each semester. Some students may need refresher courses at the basic or pre-tech level; others may receive transfer credit or credit for work experience. Delaware Tech operates on a semester system with new terms beginning in late August and mid-January, plus summer terms beginning at the end of May and in mid-June. You can start taking courses any semester or summer term; however, all technical courses may not be offered every term. Degree options in Interior Design and Interior Sales are also available.

Required Technical Courses

Architectural Design Studio introduces the design process using abstract and applied projects.

Construction Materials & Methods covers construction, materials, and methods used as they relate to the overall building industry.

Structural Drafting & Design includes drafting and design applications for various structural assemblies.

Cost Estimating and Planning includes the preparation of material lists and take-off quantities from plans and working drawings.

Contracts and Specifications studies the interpretation and preparation of specification and other construction documents, along with the legal implications.

Intro to CAD presents a comprehensive hands-on knowledge of computer-aided drafting as it applies to the architectural engineering field.

Advanced CAD is a continuation of Intro to CAD.

Engineering Construction Drafting applies technical drafting skills to various types of engineering construction documents for a small commercial structure.

Statics and Strength of Materials presents the fundamental principles dealing with the analysis of forces acting on rigid bodies in static equilibrium.

Presentation Drawing & Rendering teaches perspective and presentation techniques.

Building Service Systems introduces theory and practice in designing electrical, plumbing, heating, and HVAC systems.

Architectural Drafting & Design presents basic architectural technology and drafting techniques through the drawing of plans, elevations, sections, details, and schedules as used in residential construction documents.

Graphics for Architectural Design is an introduction to the drawing techniques for architectural design process.

Related Courses

Technical Writing & Communication
Composition
Algebra & Trigonometry I & II
Physics I
Computer Applications
Oral Communication

Human Communications
Sociology I
Macroeconomics
Social Science Elective
Critical Reading & Thinking

Getting Started

1. Obtain an application by calling (302) 857-1020. Complete and return to the Terry Campus with a \$10 application fee.
2. Take the College Placement Test (CPT) *unless college-level math, reading, and English courses have been completed with a "C" grade or better*. The CPT will determine appropriate placement and is scheduled by the Admissions Office.
3. Request that high school and/or college transcripts be sent to the Admissions Office.
4. Meet with a Delaware Tech counselor to discuss CPT results.
5. Meet with advisor to plan schedule.
6. Apply and register early for the best selection of courses.

Standards of Excellence

- ❖ Students use the most advanced and current versions of the industry's software and equipment.