

What is Architectural Engineering?

Architectural Engineering is a professional discipline focused on the planning, design, construction and operation of buildings and building systems.

What do Architectural Engineering Technicians do?

Architectural Engineering Technicians work with architects and engineers to help plan how a building is constructed so that it will look and function the way it was designed. They help prepare building design and construction documents, cost estimates, and help manage construction projects working with civil and structural engineers and contractors.

What qualities do I need to succeed in this field?

You should possess:

- An interest in construction methods and processes.
- The ability to pay attention to detail.
- The flexibility to adapt to new ideas and constantly changing technology.
- A creative mind.
- A good mathematics background.
- The ability to work well with others.

Where can I get a job?

Graduates typically work in architectural, engineering, or construction fields. They can find work with government agencies, architectural firms, engineering firms, multi-discipline design firms, or construction product manufacturers.

How much will I earn?

Architectural Engineering Technology graduates can earn an estimated salary ranging from \$28,000 - \$50,000 per year. Salary estimates are dependent on the local job market and the prior work experience of graduates. Many graduates with work experience see their degree significantly increase their earning potential.

Delaware Technical & Community College Engineering Technologies Department

Civil Engineering Technology

Architectural Engineering
Technology

Construction Management
Technology

Computer-Aided Engineering
Drafting & Design Technology

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Architectural Engineering Technology



Delaware Technical & Community College
www.dtcc.edu

What will I learn in the Delaware Tech program?

The graduate will be able to:

1. Employ concepts of architectural and engineering theory and design in a design environment.
2. Utilize modern instruments, methods, and techniques to produce architectural engineering documents and presentations.
3. Conduct standardized field and laboratory testing on construction material.
4. Utilize modern instruments and research techniques for site analysis, development and building layout.
5. Determine forces, stresses, and strains in elementary structural systems.
6. Estimate material quantities and costs for technical projects.
7. Utilize codes, contracts and specification in design, construction and inspection activities.
8. Employ productivity software to solve technical problems.
9. Solve technical problems.

What Degree will I learn?

You will earn an Associates Degree in Architectural Engineering.

When would I graduate?

You can enroll in the Architectural Engineering Technology Program 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, but many students can finish their degree in as little as two years.

What classes will I take?

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

Construction, Materials and Methods covers construction, materials, and methods of use as they relate to the overall building industry with major emphasis on the areas of soils, concrete, brick, masonry, steel, non-ferrous metals, timber and plastics.

Graphics for Architectural Design introduces the drawing techniques for the architectural design process, including both conceptual visualization and finished drawings.

Introduction to CAD using AutoCAD presents an introduction to the basic elements of computer-aided drafting.

Advanced CAD using AutoCAD emphasizes the more advanced computer-aided drawing and editing commands, symbols libraries, attributes, and basic three-dimensional drawing commands.

Structural Design I introduces the elastic design of structural steel framing members.

Statics & Strength of Materials presents the fundamental principles of engineering mechanics including the analysis of force systems on rigid bodies in static equilibrium. Lab illustrates the physical properties of materials, the physical basis of stress and strain analysis and the techniques of materials testing using laboratory experiments.

Contracts and Specifications studies the interpretation and preparation of specifications and other contract documents.

Cost Estimating & Planning includes the preparation of material lists and take-off quantities of materials and labor costs from plans, working drawings and specifications.

Architectural Design Studio introduces the design process using abstract and applied projects in three-dimensional form.

Engineering Construction Drafting studies the application of technical drafting skills to various types of engineering construction documents.

Advanced Architectural Construction Documents trains the student in architectural construction document development with an emphasis on the design development process and uses CAD application software to prepare finished construction documents.

How do I enroll?

1. Obtain an admission application by calling (302) 888-5288. Admission applications are also available online at [www dtcc. edu/alUforms/](http://www.dtcc.edu/alUforms/). Complete and return the application to the Stanton campus with a \$10 fee.
2. Request that your high school and/or college transcripts be sent to the Admissions Office.
3. Arrange to take the Computerized Placement Test (CPT) unless you have already completed college-level math and English courses with a "C" grade or better. The CPT is administered by the Admissions Office (302) 454-3954 and is used to determine appropriate course placement.
4. Meet with a Delaware Tech counselor to discuss your CPT results and select your course schedule.
5. Remember to apply and register early for the best selection of courses.