Engineering Technology

Overview

TTC's Division of Industrial and Engineering Technology offers a wide array of associate degrees and certificates designed to provide excellent career opportunities in the highly technical and rapidly expanding area of engineering technology.

Courses offered within the Department of Engineering Technology are designed to develop critical thinking and broad technical knowledge. The engineering technology principles learned are applied to practical engineering problems. Classroom study is related to shop, laboratory and field experience.

The associate degree programs require two years of study. The certificate programs require two to four semesters of study and are offered when sufficient interest is generated to support class-size groups. All have requirements for admission. Students interested in any of these programs should call the Department of Engineering Technology at 843.574.6156 for additional information on programs, scheduling and admission requirements. Any of the programs may be completed on a part-time basis, though it will require a longer period of time to do so.

General Information

As with all TTC programs, students interested in Engineering Technology programs should consult with a faculty advisor to discuss program requirements, class times and frequency of offerings. For more information, call 843.574.6156.

Cancellation Policy

TTC reserves the right to cancel courses due to inadequate enrollment.

Programs of Study

Associate Degree Programs
Civil Engineering Technology
Electronics Engineering Technology
Mechanical Engineering Technology

Certificate Programs
Architectural Design Graphics I
Architectural Design Graphics II
Basic Electronic Journeyman I
Chemical Engineering Transfer (USC)
Civil Engineering Transfer (The Citadel)
Civil/Mechanical Engineering Transfer (USC)
Computer Aided Design I
Computer Aided Design II
Construction Management
Electrical Engineering Transfer (The Citadel)
Electrical Engineering Transfer (USC)
Engineering Design Graphics
Surveying

Transfer Programs
Transfer Engineering Programs
- The Citadel
- University of South Carolina
- Clemson University

Civil Engineering Technology

Associate in Applied Science
Credit Requirements: 74 Semester Credit Hours
Day

The Civil Engineering Technology program prepares students to perform at the technician level in engineering design, drafting, surveying and construction. Employers of Civil Engineering Technology graduates include engineering consultants, surveying firms, state and federal governments, public works, construction companies, highway departments, and soil and materials testing firms. Graduates typically obtain jobs working under the supervision of land development engineers, building inspectors, construction superintendent trainees, and soil and concrete testing technicians. They aid engineers in the design of steel and concrete structures, highways, storm drainage, sewage and water supply systems. They also obtain jobs as members of survey teams or in computer-aided drafting and design.

Recommended Sequence of Courses
First Semester – Fall

CET 120	Construction Materials	3
CET 204	Surveying I	4
***EGT 109	Introduction to Engineering Design Graphics	3
ENG 101	English Composition I	3
*MAT 110	College Algebra	3
		Total 16

Second Semester – Spring

CET 205	Surveying II	4
EGT 151	Introduction to CAD	3
EGR 110	Introduction to Computer Environment	3
*MAT 111	College Trigonometry	3
		Total 13

Third Semester – Summer

EGR 190	Statics	3
**PHY 201	Physics I	4
PSY 201	General Psychology	3
SPC 205	Public Speaking	3
		Total 13

Fourth Semester – Fall

CET 210	Strength of Materials	3
CET 218	Hydraulics	3
GMT 250	Evidence Procedures for Boundary Control	3
*MAT 130	Elementary Calculus	3
or		
MAT 120	Probability and Statistics	3
**PHY 202	Physics II	4
		Total 16

Fifth Semester – Spring

CET 215	Soil Mechanics Fundamentals	2
CET 244	Structural Steel Design	3
CET 246	Environmental Systems Technology	3
CET 251	Highway Design	3
ELE CET	Select one course from the Civil Engineering Technology Electives	2
ELE HUM	Select one course from Humanities Electives on page B-3	3
		Total 16

Civil Engineering Technology Electives

AET 110	Architectural Graphics I	3
CET 127	Building Construction and Print Reading	4
CET 135	Construction Contracts	2
CET 230	Construction Management	3
CET 238	Construction Planning and Scheduling	2
CET 245	Cost Estimating	3
CWE	Cooperative Work Experience	2
EGR 282	Introduction to Civil Engineering	2
EGT 152	Fundamentals of CAD	3

**Students may choose any of the following math sequences: MAT 110, MAT 111, MAT 130; or MAT 110, MAT 111, MAT 120; or MAT 110, 111, 140; or MAT 112, MAT 140.*
***Students may choose PHY 221 instead of PHY 201 and PHY 222 or CHM 110 instead of PHY 202.*
****Allowable alternate: EGR 275*

Civil Engineering Technology

Associate in Applied Science
Credit Requirements: 74 Semester Credit Hours
Day/Evening

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Recommended Sequence of Courses
First Semester – Fall

CET 120	Construction Materials	3
***EGT 109	Introduction to Engineering Design Graphics	3
ENG 101	English Composition I	3
		Total 9