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
General Technology
  Engineering Design Graphics
Mechanical Engineering Technology

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

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

Civil Engineering Technology

Associate in Applied Science
Credit Requirements: 63-67 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 as building inspectors, construction superintendent trainees and soil- and concrete-testing technicians, and under the supervision of engineers. They aid engineers in the design of steel and concrete structures, highways, storm drainage, land development, 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	Fundamentals of Surveying	4
EGT 151	Introduction to CAD	3
ENG 101	English Composition I	3
MAT 170	Algebra, Geometry and Trigonometry I	3
		Total 16

Second Semester – Spring

EGR 110	Introduction to Computer Environment	3
EGR 290	Numerical Applications in Engineering Technology	3
EGT 152	Fundamentals of CAD	3
PSY 201	General Psychology	3
SPC 205	Public Speaking	3
		Total 15

Third Semester – Summer

EGR 194	Statics and Strength of Materials	4
CWE	Cooperative Work Experience	4
		Total 8

Fourth Semester – Fall

CET 215	Soil Mechanics Fundamentals	2
CET 218	Hydraulics	3
EGT 257	Advanced Civil CAD	3
ELE CET	Select one course from the Civil Engineering Technology Electives	2-4
		Total 10-12

Fifth Semester – Spring

CET 247	Introduction to Structural Design	3
CET 246	Environmental Systems Technology	3
CET 251	Highway Design	3
ELE CET	Select one course from the Civil Engineering Technology Electives	2-4
REQ HUM	Select one course from Humanities listing on page B-3	3
		Total 14-16

Civil Engineering Technology Electives

CET 127	Building Construction and Print Reading	4
CET 135	Construction Contracts	2
CET 205	Surveying II	4
CET 230	Construction Management	3
CET 238	Construction Planning and Scheduling	2
CET 245	Cost Estimating	3
CWE	Cooperative Work Experience	2

Electronics Engineering Technology

Associate in Applied Science
Credit Requirements: 68 Semester Credit Hours
Day

The Electronics Engineering Technology program prepares students for a broad range of jobs in the electrical and electronic fields. Graduates of the program may become employed as broadcast technicians, business machine technicians, customer service representatives, computer service technicians, engineering technicians, laboratory technicians, field engineering technicians, engineering aides, electrical sales technicians, technical writers and electrical instrument technicians.

Recommended Sequence of Courses
First Semester – Fall

EGR 104	Engineering Technology Foundations	3
EGR 110	Introduction to Computer Environment	3
ENG 101	English Composition I	3
MAT 170	Algebra, Geometry and Trigonometry I	3
		Total 12

Second Semester – Spring

EGR 290	Numerical Applications in Engineering Technology	3
EET 113	Electrical Circuits I	4
EET 145	Digital Circuits	4
EGT 151	Introduction to CAD	3
		Total 14

Third Semester – Summer

EET 131	Active Devices	4
EGR 234	Control Principles	3
EET 274	Selected Topics	3
REQ HUM	Select one course from Humanities listing on page B-3	3
		Total 13

Fourth Semester – Fall

MET 237	Fluids: Principles and Applications	4
EEM 251	Programmable Controllers	3
EEM 252	Programmable Controller Applications	3
MET 233	Applied Thermal Principles	4
		Total 14