

# APPLIED ENGINEERING & TECHNOLOGIES

## CIVIL ENGINEERING TECHNOLOGY

### Civil Engineering Technology Degree - A40140

The Civil Engineering Technology curriculum provides the application of relevant theory of engineering needed by technicians to carry out planning and supervisory tasks in the construction of transportation systems, residential and commercial buildings, bridges, dams, and water and wastewater treatment systems.

Course work includes the communication and computational skills required to support the fields such as materials testing, structures, estimating, project management, hydraulics, environmental technology, and surveying. Additional course work will cover the operation of computers and application software including computer-aided drafting.

Graduates should qualify for technician-level jobs with both public and private engineering, construction, and surveying agencies and are also eligible to continue on at East Carolina University and UNC-Charlotte as a junior.

### Civil Engineering Technology: Civil Tech I - C40140D

### Civil Engineering Technology: Civil Design Elements I – C40140E

### Civil Engineering Technology: Civil Design Elements II – C40140F

#### Program Sequence

##### First Semester

CEG 111	Introduction to GIS and Gnss.....	4
EGR 115	Intro to Technology .....	3
EGR 115A	Intro to Technology Lab .....	1
ENG 111	Writing and Inquiry .....	3
	Math Elective.....	3

##### Second Semester

CEG 151	CAD for Engineering Technology .....	3
EGR 251	Statics .....	3
GIS 246	Principles of Property Mapping .....	3
PSY 150	General Psychology.....	3
SRV 110	Surveying I .....	4

*Completes Civil Tech I Certificate (C40140D): CEG 111, CEG 151, EGR 115, GIS 246, SRV 110*

##### Third Semester

ENG 112	Writing and Research in the Disciplines.....	3
PHI 240	Introduction to Ethics.....	3

##### Fourth Semester

CEG 210	Construction Materials & Methods .....	3
CEG 211	Hydrology & Erosion Control.....	3
CIV 125	Civil/Surveying CAD .....	3
EGR 252	Strength of Materials .....	3
SRV 111	Surveying II .....	4

*Completes Civil Design Elements I Certificate (C40140E): CEG 210, CEG 211, EGR 251, EGR 252, SRV 111*

##### Fifth Semester

CEG 212	Introduction to Environmental Tech.....	3
CEG 230	Subdivision Planning & Design.....	3
CEG 235	Project Management and Estimating .....	3
CIV 111	Soils and Foundations .....	4
	Major Elective .....	2

*Completes Civil Design Elements II Certificate (C40140F): CEG 212, CEG 230, CEG 235, CIV 111, CIV 125*

##### Math Electives

(Select 3 hours from the following courses):

MAT 121	Algebra/Trigonometry I.....	3
MAT 171	Precalculus Algebra.....	4

##### Major Electives

(Select 2 hours from the following courses):

GIS 121	Georeferencing & Mapping .....	3
ISC 121	Environmental Health & Safety.....	3
MAT 172	Precalculus Trigonometry.....	4
SRV 240	Topo/Site Surveying .....	4
WBL 112	Work-Based Learning I.....	2
WBL 120	Career Readiness, Explor, & Employ. ....	3

**Graduation Requirements ..... 67 Credit Hours**