

PROGRAM SUMMARY

- **Credit Hours:** 126
- **Concentration Areas:** Applied Energy and Sustainable Systems
- **Declaring the Major:** Students may declare a major in Civil Engineering Technology at the time of admission. Students in good academic standing may submit a Change of Major form at any time to declare a major in Civil Engineering Technology. Orientation and/or advising sessions are required for new students.
- **Advising (For the Major):** Required upon admission to the major and before each semester. Assigned advisors hold group advising sessions, followed by individual advising by appointment.
- **Advising (For General Education):** By Academic Advisor in the department.
- **Minimum Grades/GPA:** GPA of 2.0 in the major required for graduation. Grades of C or better are required in all freshman level courses, as shown on the Suggested Plan of Study.
- **Teacher Licensure:** No.
- **Evening Classes Available:** Some upper division (junior/senior) classes are available late afternoon or evening on a rotating basis. It is highly unlikely that students would be able to complete the degree requirements through evening courses alone.
- **Weekend Classes Available:** No.
- **Other Information:** Students who complete an Associate in Applied Science degree (AAS) in a related field before enrolling at UNC Charlotte are eligible for the Civil Engineering Technology 2+2 Program, which allows students to complete their B.S.E.T. degree with a minimum of two additional years of coursework. Students have the option of completing the requirements of the Civil Engineering Technology degree as a dual major with the B.S.C.M. in Construction Management. This plan of study typically takes two additional semesters to complete.
- **Contact(s):** Ms. Jamie Sheppard, Academic Advisor (jshepp12@uncc.edu)
 Dr. Thomas Nicholas, Ph.D., PE, Program Director (tnichola@uncc.edu)

PROGRAM REQUIREMENTS

The Civil Engineering Technology program at UNC Charlotte includes education, research, and technology development in the areas of structures, construction, transportation, water resources, and geotechnics. In the first two years, emphasis is placed on fundamental mathematical, scientific, and communication skills through topics including the fundamentals of engineering technology, surveying, construction materials, methods, environmental technology, and structures. The third and fourth years provide emphasis on analysis and design with specialized courses in soil mechanics, foundation design, structural analysis, design of steel, concrete, and timber structures, and highway design and construction.

Areas	Credit Hours	Description
Pre-Major/ Prerequisites	-	Any student declaring a major in the Civil Engineering Technology program at UNC Charlotte must submit a Change of Major application for review. AAS transfer students must fulfill a series of specified prerequisite courses before proceeding with upper-division coursework. All new CIET majors are required to meet with a Student Support Specialist for pre-registration advising.
Major	83	Major courses are specified by the department.
General Education (not satisfied by other major requirements)	37	First-Year Writing courses / Basic Skills of Information Technology (UWRT 1103 or 1104); Mathematical & Logical Reasoning (MATH 1103 & STAT 1220); Social Science (ANTH 1101/GEOG 1105/ECON 1101 or 2101/POLS 1110/SOCY 1101); Natural Science (PHYS 1101 & 1101L, PHYS 1102, GEOL 1200 and Science or Math Elective); Themes of Liberal Education (LBST 110X and 2301; and two from: LBST 2101, 2102, and 221X).
Related Work	-	
Foreign Language	-	
Electives	6	Students must complete two 3 credit hour major elective courses. Major electives are selected from the list of approved core Civil Engineering Technology electives and approved by the advisor.
Total Credit Hours	126	

SUGGESTED PLAN OF STUDY

Freshman Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
UWRT 1103	Writing and Inquiry in Academic Contexts I & II	3	X		Grade of C or better required
ETCE 1222	Construction Materials	3			Grade of C or better required
ETCE 1222L	Construction Materials Laboratory	1			Grade of C or better required
ETCE 1104	Civil Construction CAD Applications	3			Grade of C or better required
ETGR 1100L	Engineering Computer Applications	1			Grade of C or better required
ETGR 1201	Intro to Engineering Technology	2			Grade of C or better required
MATH 1103	Pre-Calculus Math for Sci. & Eng.	3	X		Grade of C or better required
<i>Spring Semester</i>					
CMET 1680	Prof. Development I: Construction Safety	1			Grade of C or better required
ETCE 2105	Plan Reading & Quantity Takeoff	3			
ETCE 1211	Construction Surveying I	3			Grade of C or better required
ETCE 1211L	Construction Surveying I Laboratory	1			Grade of C or better required
XXXX XXXX	Social Science Elective	3	X		Grade of C or better required
LBST 110X	LBST Series: Arts & Society	3	X		Grade of C or better required
MATH 1121	ET Calculus or ETGR 2171 Engineering Analysis I	3			Grade of C or better required

33 Credit Hours for Year

Sophomore Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ETGR 2101	Applied Mechanics I	3			Grade of C or better required
ETGR 2272	Engineering Analysis II	3			
PHYS 1101	Introductory Physics I	3	X		Grade of C or better required
PHYS 1101L	Introductory Physics I Laboratory	1	X		
GEOG 1200	Physical Geology	3	X		
CMET 2135	Building Information Modeling	3			
<i>Spring Semester</i>					
ETCE 2410	Intro. to Environmental Engineering Technology	3			
ETCE 2221	Construction Means and Methods	3			
ETGR 2102	Applied Mechanics II	3			
PHYS 1102	Introductory Physics II	3	X		Must complete prior to taking 4000 level ET courses
STAT 1220	Elements of Statistics I	3	X		

31 Credit Hours per Year

Junior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
XXXX XXXX	Science/Math Elective	3	X		Selected from list of approved electives
ETCE 3131	Soil Mechanics & Earthwork	3			
ETCE 3131L	Soil Testing Laboratory	1		W	
ETCE 3163	Structural Analysis & Design I	3			
ETCE 3163L	Structures and Materials Lab	1		W	
ETGR 3295	Multidisciplinary Professional Development	1			
LBST 2301	LBST Series: Critical Thinking and Communication	3	X		
<i>Spring Semester</i>					
ETCE 3242	Hydraulics and Hydrology	3			
ETCE 3242L	Hydraulics Laboratory	1		W	
ETCE 3264	Structural Analysis II	3			
ETCE 4350	Construction Geotechnics and Foundations	3			
ETGR XXXX	Engineering Analysis: ETGR 3171 or ETGR 4272	3			Recommend both if interested in Graduate School
LBST 2XXX	LBST Series	3	X		

31 Credit Hours for Year

Senior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
ETCE 4165	Structural Steel Design	3			
ETCE 4251	Highway Design & Construction	3			
ETGR 3222	Engineering Economics	3			
XXXX XXXX	Major Elective	3			Selected from list of approved electives
CMET 3224	Construction Project Administration	3			
<i>Spring Semester</i>					
CMET 3680	Prof. Development III: Professional Ethics	1			
ETCE 4266	Reinforced Concrete Design	3			
CMET 3123	Cost Estimating	3			
ETCE 4272	Capstone Project	3		W, O	
LBST 2XXX	LBST Series	3	X		
XXXX XXXX	Major Elective	3			Selected from list of approved electives

31 Credit Hours for Year

ADVISING RESOURCES

- General Education Requirements for ALL Students: ucol.uncc.edu/general-education
- Undergraduate Catalog: catalog.uncc.edu
- Central Advising website: advising.uncc.edu
- Department of Engineering Technology advising website: et.uncc.edu/advising.html
- William States Lee College of Engineering advising website: coe.uncc.edu/current-students/advising.html
- University Advising Center website: advisingcenter.uncc.edu