

PROGRAM SUMMARY

- **Credit Hours:** 124
- **Concentrations:** Applied Energy
- **Declaring the Major:** Students may declare a major in Electrical 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 Electrical 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 Student Services Specialists in the department.
- **Minimum Grades/GPA:** GPA of 2.0 in the major required for graduation. Grades of C or better required in all freshman-level courses, as shown on 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 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 Electrical Engineering Technology 2+2 Program, which allows students to complete their BSET degrees with two additional years of coursework. The ETCM Department also offers a Distance Education option for students interested in earning the BSET in Electrical Engineering Technology. This program, which is set up on a part-time basis, is designed to meet the academic needs of individuals who currently hold an AAS in an appropriate field of study but cannot attend classes on campus during regular semesters.
- **Contact(s):** Dr. Deborah Sharer, Program Director (dlsharer@uncc.edu)
 Ms. Alexis Jennings, Student Services Specialist (ajenni25@uncc.edu)

PROGRAM REQUIREMENTS

The Electrical Engineering Technology (ELET) program prepares graduates of the BSET program for careers across a broad spectrum of technologies. In general, coursework in the program includes experience in the following areas: Linear Circuits; Digital Logic and Systems; Microprocessors, Microcontrollers and Embedded Systems; Electronic Circuits and Systems; Control Systems; and Power Systems. The first two years of Electrical Engineering Technology concentrate on fundamentals of mathematics and science along with the development of written and oral communications skills. The third and fourth years of the BSET program provide students with classes intended to expand upon the fundamentals covered in the first two years. Greater emphasis is placed on principles rather than on introductory topics. Computer simulation, as well as more advanced mathematical tools, allows treatment of technologies in greater depth and over a wider range. The program culminates in a Capstone Project in which a student is expected to demonstrate not only an understanding of electrical technologies, but also the ability to plan, execute, and provide written and oral reports about a project.

Areas	Credit Hours	Description
Pre-Major/ Prerequisites	-	Any student declaring a major in the Electrical 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 ELET majors are required to meet with the ELET Student Services Specialist for pre-registration advising.
Major	80	Major courses are specified by the department.
General Education (not satisfied by other major requirements)	35	First-Year Writing Course / Basic Skills of Information Technology (UWRT 1103 or 1104); Mathematical & Logical Reasoning (MATH 1103 & STAT 1220); Social Science (ANTH 1101/GEOS 1105/ECON 1101 or 2101/POLS 1110/SOCY 1101); Natural Science Courses (PHYS 1101 & 1101L, 1102 & 1102L, and CHEM 1251); Themes of Liberal Education (LBST 110X and 2301, and two from LBST 2101, 2102, and 221X).
Related Work	-	
Foreign Language	-	
Electives	9	Students must complete three major elective courses of 3 credit hours each. Major electives are selected from the list of approved core electives and approved by the advisor.
Total Credit Hours	124	

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		Must complete with a grade of C or better.
MATH 1103	Pre-calculus Math for Science and Engineering	3	X		Must complete with a grade of C or better.
ELET 1101	Simulation & Schematic Capture	1			Must complete with a grade of C or better.
ELET 1111	DC Circuits	3			Must complete with a grade of C or better.
ELET 1111L	DC Circuits Lab	1			Must complete with a grade of C or better.
ETGR 1100L	Engineering Technology Computer Apps Lab	1			Must complete with a grade of C or better.
ETGR 1201	Intro to Engineering Technology	2			Must complete with a grade of C or better.
<i>Spring Semester</i>					
MATH 1121	ET Calculus or ETGR 2171 Engineering Analysis I	3			Must complete with a grade of C or better.
ELET 1231 + L	Digital Circuits	3			Must complete with a grade of C or better.
ELET 1231L	Digital Circuits Lab	1			Must complete with a grade of C or better.
ELET 1212 + L	AC Circuits	3			Must complete with a grade of C or better.
ELET 1212L	AC Circuits Lab	1			Must complete with a grade of C or better.
XXXX XXXX	Social Science Elective	3	X		Must complete with a grade of C or better.
LBST 110X	LBST 1100 Series: Arts & Society	3	X		Must complete with a grade of C or better.

31 Credit Hours for Year

Sophomore Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
STAT 1220	Elements of Statistics I	3	X		
PHYS 1101	Introductory Physics I	3	X		Must complete with grades of C or better.
PHYS 1101L	Introductory Physics I Lab	1	X		Must complete with grades of C or better.
ELET 2121	Electronics I	3			Must complete with grades of C or better.
ELET 2121L	Electronics I Lab	1			Must complete with grades of C or better.
ELET 2141	Introduction to Power Systems	3			
ELET 2201	C Programming	3			
<i>Spring Semester</i>					
ETGR 2272	Engineering Analysis II	3			Must complete with grades of C or better.
PHYS 1102	Introductory Physics II	3	X		
PHYS 1102L	Introductory Physics II Lab	1	X		
ELET 2231	Microprocessor Fundamentals	3			
ELET 2241	Instrumentation	3			
ELET 2241L	Instrumentation Lab	1			
ELET 2290	Sophomore Practicum	2			

33 Credit Hours for Year

Junior Year

Course Number	Course Title	Credit Hours	General Education	W/O Course	Notes
<i>Fall Semester</i>					
CHEM 1251	Principles of Chemistry	3	X		
ELET 3132	Digital Systems	3			
ELET 3132L	Digital Systems Lab	1		W	
ELET 3113	Network Analysis	3			
ELET 3191	Junior Practicum I	1			
ETGR XXXX	Engineering Analysis : ETGR 3171 or ETGR 4272	3			
<i>Spring Semester</i>					
ELET 3222	Electronics II	3			
ELET 3222L	Electronics II Lab	1		W	
ELET 3232	Microcontroller Systems	3			
ELET 3292	Junior Practicum II	1			
ETGR 2122	Technical Programming	3			
ETGR 3222	Engineering Economics	3			
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>					
ELET 4123	Active Filters	3			
ELET 4142	Power Electronics / Networks	3			
XXXX XXXX	Major Elective	3			Chosen from approved major elective list
ETGR 4100	ET Senior Design Project I	2		W, O	Requires department approval
ETGR 3295	Multidisciplinary Professional Development	1			
LBST 2XXX	LBST Series	3	X		
<i>Spring Semester</i>					
ELET 4242	Control Systems	3			
ETGR 4200	ET Senior Design Project II	2		W, O	
XXXX XXXX	Major Elective	3			Chosen from approved major elective list
XXXX XXXX	Major Elective	3			Chosen from approved major elective list
LBST 2301	LBST Series: Critical Thinking and Communication	3	X		

29 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
- William States Lee College of Engineering advising website: enr.uncc.edu/current-students/advising
- Department of Engineering Technology advising website: et.uncc.edu/current-students/advising
- University Advising Center website: advisingcenter.uncc.edu