

<b>Bachelor of Science in Electrical Engineering</b>						
NOTE: This plan should be used in conjunction with regular consultation with an advisor						
Required for Admission to UNCC in <b>Electrical Engineering</b>	<b>If 24 or more transfer hours</b>			OR	<b>If less than 24 transfer hours</b>	
	2.5 Transfer GPA				Transfer admissions requirements	
	MATH 1103, completed with Grade "C" or better				AND Freshman Admissions Requirements	
See <a href="#">Transfer Requirements</a> on the Office of Undergraduate Admissions web page for more details						
Additional Requirements for Admission to the upper division in <b>Electrical Engineering</b>			Not Applicable			
<b>Associate in Engineering</b>						
Courses in BOLD are required for the major						
UGETC -- Associate of SCIENCE						
Area	Prefix/Number	Course Name	Credits	UNC Charlotte Equivalent	Credits	
English Composition (6 CR)						
English Composition	ENG 111	Expository Writing	3	UWRT 1101:	3	
	ENG 112	Argument-Based Research	3	UWRT 1102: CTC Requirement	3	
Humanities / Fine Arts (6 CR)						
Arts: (choose <u>ONE</u> )	ART 111	Art Appreciation	3	LBST 1105	3	
	ART 114	Art History Survey I		ARTH 1211 (and LBST 1105 exemption)		
	ART 115	Art History Survey II		ARTH 1212 (and LBST 1105 exemption)		
	MUS 110	Music Appreciation		LBST 1103		
	MUS 112	Introduction to Jazz		TRNF 0001 (and LBST 1103 exemption)		
Literature / Philosophy (choose <u>ONE</u> )	ENG 231	American Literature I	3	ENGL 2104 (and LBST 2212 exemption)	3	
	ENG 232	American Literature II		ENGL 0001 (and LBST 2212 exemption)		
	PHI 215	Philosophical Issues		PHIL 2101 (and LBST 2211 exemption)		
	PHI 240	Introduction to Ethics		PHIL 0001 (and LBST 2211 exemption)		
Social / Behavioral Science (6 CR)						
Social Science (choose <u>ONE</u> )	ECO 251	Principles of Microeconomics	3	ECON 2102	3	
	ECO 252	Principles of Macroeconomics		ECON 2101		
History (choose <u>ONE</u> )	HIS 111	World Civilizations I	3	HIST 1120 (and LBST 2101 exemption)	3	
	HIS 112	World Civilizations II		HIST 1121 (and LBST 2101 exemption)		
	HIS 131	American History I		HIST 1160 (and LBST 2101 exemption)		
	HIS 132	American History II		HIST 1161 (and LBST 2101 exemption)		
Science with Lab (12 CR)						
Required Sciences (must complete all Sciences w/ Lab)	CHM 151	General Chemistry I	12	CHEM 1251 + lab	12	
	PHY 251	General Physics I		PHYS 2101 + labs		
	Phy 252	General Physics II		PHYS 2102 + labs		
Mathematics (8 CR)						
Required Mathematics (Choose two)	MAT 271	Calculus I	8	MATH 1241 (3) + lab credit (1)	8	
	MAT 272	Calculus II		MATH 1242 (3) + lab credit (1)		
	MAT 285	Differential Equations		MATH 2171 (3) + lab credit (1)		
<b>UGETC Subtotal</b>			<b>38</b>		<b>38</b>	

Additional General Education					
Global / Cross Cultural (Choose ONE)	ANT 220 or 221	Cultural Anthropology or Comparative Cultures	3	ANTH 0001 (and LBST 2102 exemption)	3
	GEO 111	World Regional Geography		GEOG 1101 (and LBST 2102 exemption)	
	GEO 112	Cultural Geography		GEOG 0001 (and LBST 2102 exemption)	
	POL 210 or 220	Comparative Politics or International Politics		POLS 1130 or POLS 1150 (and LBST 2102 exemption)	
	If <b>BOTH</b> HIS 111 AND HIS 112	World Civilizations I & II		HIST 1120 AND HIST 1121 (gives LBST 2101 and 2102 exemption ONLY if both are taken)	
	ACA 122	Academic Transition	1	TRNF 0001	1
Subtotal			4		4
PRE Major - Courses					
	MAT 273	Calculus III	3	MATH 2241	3
	MAT 280	Linear Algebra	3	MATH 2164 (Matrices and Linear Algebra)	3
	EGR 150	Intro to Engineering	2	ENGR 1201 - Intro to Engr. Prac. & Prin.	2
	CSC 134	C++ Programming	3	ECGR 2103 -C++ Programming	3
	EGR 212	Logic Systems Design I	3	ECGR 2181 - Logic System & Design I	3
	EGR 215	Network Theory I	3	ECGR 2111 - Network Theory I	3
	EGR 216	Logic and Network Lab	1	ECGR 2155 - Logic and Network Lab	1
	EGR 218	Network Theory II	3	ECGR 2112 - Network Theory II	
	EGR 219	Instrument and Network Lab	1	ECGR 2156 - Instrum. & Network Lab	
Pre-major Subtotal			22		22
<b>TOTAL AA Hours</b>			<b>64</b>		<b>64</b>
NOTES	All of the courses listed in the Pre-Major courses section are required for the Electrical Engineering degree, if any are not completed within the AE degree the student will complete once at UNC Charlotte. In addition, there are 3 ( <b>7 cr hrs</b> ) University level courses from the first and second year that will need to be completed once the student has transferred to UNC Charlotte (Introduction to Engineering Practice & Principles II, ECE Sophomore Design, and Modern Physics).				
<b>BS -- Electrical Engineering UNC Charlotte Courses</b> Courses in <b>BOLD</b> are pre-requisites for subsequent courses					
Junior Year					
	Fall	Signal and Systems		<b>ECGR 3111</b>	3
		Introduction to Electromagnetic Fields		<b>ECGR 3121</b>	3
		Fundamentals of Electronics and Semiconductors		<b>ECGR 3131</b>	3
		Systems and Electronics Lab		<b>ECGR 3155</b>	1
		Probability and Statistics for Engineers		STAT 3128	3
	Spring	Electromagnetic Waves		ECGR 3122	3
		Electronics		ECGR 3132	3
		Electromagnetic Devices or Solid State Microelectronics		ECGR 3142 or ECGR 3133	3
		Electromagnetic and Electronic Devices Laboratory		ECGR 3156	1
		System Analysis II		ECGR 3112	3
		Junior Design II		<b>ECGR 3157</b>	2
		Professional Development		ENGR 3295	1
Senior Year					
	Fall	Electrical Engineering Senior Design I		<b>ECGR 4241</b>	2
		Analog and Digital Comm. Or Digital Signal Processing		ECGR 4123 or ECGR 4124	3
		4000 Level ECGR Course		ECGR 4XXX	3
		4000 Level ECGR Course		ECGR 4XXX	3
		Technical Elective		XXXX XXXX	3
	Spring	Electrical Engineering Senior Design II		ECGR 4242	3
		Professional Practice		ECGR 3159	2
		Thermodynamics I		MEGR 3111	3
		4000 Level ECGR Course		ECGR 4XXX	3
		4000 Level ECGR Course		ECGR 4XXX	3
<b>TOTAL UNCC Hours</b>					<b>57</b>
<b>TOTAL HOURS</b>					<b>121</b>