



# ELIZABETH CITY STATE UNIVERSITY

## Curriculum Guide for

### **Bachelor of Science Degree: Engineering Technology (*Electrical and Computer Engineering Technology*)**

**ASSOCIATE OF ARTS DEGREE:** *Universal General Education Component (UGETC)*

First two years (Freshman and Sophomore) to be completed at community college.

<u>Community College Course #</u>	<u>Hours</u>	<u>Community College Course Title</u>	<u>Elizabeth City State University Equivalency</u>	<u>Hours</u>	<u>Comments</u>
<b>English Composition</b>	<b>6 SHC</b>	<i>The following two English composition courses are required.</i>			
ENG 111	3 SHC	Writing and Inquiry	ENGL 102 Eng. Comp & Grammar	3 SHC	Required by Major.
ENG 112	3 SHC	Writing/Research in the Disciplines	ENGL 103 Eng. Comp & Vocab.	3 SHC	Required by Major.
<b>Social/ Behavioral Science</b>	<b>9 SHC</b>	<i>Select three courses from the following from at least two different disciplines.</i>			
HIS 111	3 SHC	World Civilizations I	HIST 140 World Civ. I	3 SHC	Required by Major.
HIS 112	3 SHC	World Civilizations II	HIST 141 World Civ. II	3 SHC	Required by Major.
HIS 131	3 SHC	American History I	HIST 255 American History to 1877	3 SHC	
HIS 132	3 SHC	American History II	HIST 256 American History Since 1877	3 SHC	

ECO 251 ECO 252 POL 120	3 SHC 3 SHC 3 SHC	Principles of Microeconomics Principles of Macroeconomics American Government	ECON 201 Prin. of Econ. I ECON 202 Prin. of Econ. II POLS 298 American National Government	3 SHC 3 SHC 3 SHC	Preferred by Major.
PSY 150 SOC 210	3 SHC 3 SHC	General Psychology Intro. to Sociology	PSY 212 General Psychology SOC 201 Intro to Sociology	3 SHC 3 SHC	Preferred by Major.
<b>Humanities/Fine Arts</b>	<b>9 SHC</b>	<i>Select three courses from the following from at least two different disciplines.</i>			
<u>Communications</u> COM 231	3 SHC	Public Speaking	SPCH 314 Public Speaking	3 SHC	Required by Major.
<u>Humanities/Fine Arts</u> ART 111 ART 114 ART 115	3 SHC 3 SHC 3 SHC	Art Appreciation Art History Survey I Art History Survey II	ART 130 Art Appreciation	2 SHC	Required by Major. (Take either ART 111 or MUS 110) 1 hr. used as an elective.
ENG 231 ENG 232	3 SHC 3 SHC	American Literature I American Literature II	ENGL 201 World Literature I ENGL 202 World Literature II	3 SHC 3 SHC	Preferred by Major. Preferred by Major.
MUS 110 MUS 112	3 SHC 3 SHC	Music Appreciation Introduction to Jazz	MUS 135 Intro. to Music	2 SHC	Required by Major. (Take either ART 111 or MUS 110) 1 hr. used as an elective.
PHI 215 PHI 240	3 SHC 3 SHC	Philosophical Issues Introduction to Ethics	Social/Behavioral Science Elective	3 SHC	
<b>Mathematics</b>	<b>3-4 SHC</b>	<i>Select one course from the following:</i>			
MAT 143	3 SHC	Quantitative Literacy	MATH 114 Mathematics for Liberal Arts	3 SHC	
MAT 152	4 SHC	Statistical Methods I	STAT 251 Basic Statistics	3 SHC	(Elective.)
MAT 171	4 SHC	Pre-calculus Algebra	MATH 115 College Algebra	3 SHC	Required by Gen. Ed.

<b>Natural Sciences</b>	<b>4 SHC</b>	<i>Select one course from the following:</i>			Note: Biology, Chemistry, and Physics courses must be taken in sequence.
AST 111/111A	4 SHC	Descriptive Astronomy I/Lab	Natural Science Elective	4 SHC	
AST 151/151A	4 SHC	General Astronomy I/Lab	Natural Science Elective	4 SHC	
BIO 110	4 SHC	Principles of Biology	BIOL 155/155L Principles of Biological Science/Lab	4 SHC	
BIO 111	4 SHC	General Biology I	BIOL 101/L General Bio. I	4 SHC	
GEL 111	4 SHC	Introduction to Geology	Natural Science Elective	4 SHC	
PHY 110/110A	4 SHC	Conceptual Physics and Lab	PHYS 181/181L General Physics II/Lab	4 SHC	Required by Gen. Ed.
CHM 151	4 SHC	General Chemistry I	CHEM 101 and 101lab	4 SHC	Required by Gen. Ed.
<b>Total UGETC Hours</b>	<b><u>31-32 SHC</u></b>				
<b>Additional GE Courses</b>	<b><u>13-14 SHC</u></b>				
CIS 110	3 SHC	Introduction to Computers	CSC 111 Intro. to Computers	3 SHC	Required by Gen. Ed. (Note that the program requires CSC 115 Programming I).
HEA 110	3 SHC	Personal Health and Wellness	HLTH 185 Health Concepts	2 SHC	Required by Gen. Ed. 1 hr. used as an elective.
	2 SHC	Physical Activity	Physical Activity	2 SHC	Required by Gen. Ed.
MAT 152	4 SHC	Stat. Methods	STAT 251 Basic Statistics	3 SHC	Elective.
	3 SHC	Social/Behavioral Science Elective	Social/Behavioral Science Elective	3 SHC	Required by Major.
<b>Total General Education Hours Required</b>	<b><u>45 SHC</u></b>				

<b><u>Other Required Hours</u></b>	<b><u>15-16 SHC</u></b>				
EGR 150	2 SHC	Intro. to Engineering (2 credit hours from EGR 210 and EGR 210)	ENGT 100/ENGT 100L Intro. to Engineering Tech.	4 SHC	Required by Major.
EGR 120	3 SHC	Engineering and Design Graphics	ENGT 105 CAD I	3 SHC	Required by Major.
EGR 210 and EGR 215	3 SHC and 2 SHC	Intro. to Electrical/Computer Engineering Lab and Network Theory I	ENGT 205/ENGT 205L Circuit Analysis/Lab	4 SHC	Required by Major.
MAT 271	4 SHC	Calculus I	MATH 165 Calculus I	4 SHC	Required by Major.
MAT 272	4 SHC	Calculus II	MATH 265 Calculus II	4 SHC	Required by Major.
<b><u>Academic Transition</u></b>	<b><u>1 SHC</u></b>	<i>The following course is required.</i>			
ACA 122	1 SHC	College Transfer Course	UNIV 110 Freshman Seminar	1 SHC	Required by CAA.
<b><u>Total Semester Hours in Program</u></b>	<b><u>60-61 SHC</u></b>				

The Junior and Senior years will be completed at Elizabeth City State University.

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			<i>Semester 5: (16 credit hours)</i>		
			ENGT 220 Instrumentation and Measurement	3 SHC	Major Requirement.
			ENGT 310/310L Applied Mechanics/Lab	4 SHC	Major Requirement.
			ENGT 245 Intro. To LAN & WAN	3 SHC	Major Requirement
			Elective	3 SHC	Major Requirement.
			ENGL 401 Technical Writing	3 SHC	Major Requirement.
			<i>Semester 6: (17 credit hours)</i>		
			ENGT 340 Analog and Digital comm.	3 SHC	Major Requirement.
			ENGT 235/235L Analog and Digital Circuits I/Lab	4 SHC	Major Requirement.
			ENGT 215/215L PC Hardware and Software /Lab	4 SHC	Major Requirement.
			ENGT 365 Computer Design	3 SHC	Major Requirement.
			CSC aa5 Programming I	3 SHC	Major Requirement.
			<i>Semester 7: (14 credit hours)</i>		
			ENGT 335/ENGT 335L Analog and Digital Circuits II/Lab	4 SHC	Major Requirement.

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			ENGT 465/465L Microprocessor/Lab	5 SHC	Major Requirement.
			ENGT 455 Senior Project I	2 SHC	Major Requirement.
			Elective	3 SHC	Major Requirement.
			<i>Semester 8: (16 credit hours)</i>		
			ENGT 360/360L Control System/Lab	4 SHC	Major Requirement.
			MNGT 421 Operations Management	3 SHC	Major Requirement.
			ENGT 499 Senior Project II	2 SHC	Major Requirement.
			ENGT 210/210L Material and Process/Lab	4 SHC	Major Requirement.
			Elective	3 SHC	Major Requirement.
			<b><i>Total ECSU Semester Credit Hours Completed</i></b>	<b><i>63 SHC</i></b>	
			<b><i>Total Semester Credit Hours Completed for Degree</i></b>	<b><i>120 SHC</i></b>	
			Reviewed by: ECSU – Dr. Akbar Eslami		Approved 2-2-2018