

Associate in Engineering (A.E.) Degree – A10500

Effective Fall 2020

Name: _____

Date: _____

Course Requirements	Hours	Pre-&-Corequisites	Course Completed
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I. Composition	6 Total		
ENG 111 Writing & Inquiry	3	(Co. req. ENG 011) BSP 4002 ENG 002 DRE 097	_____
ENG 112 Writing/Research in the Disciplines	3	ENG 111	_____

II. Humanities/Fine Arts/Communications	6 Total		
COM 231 Public Speaking	3	NONE	_____
PHI 240 Introduction to Ethics	3	ENG 111	_____

III. Social/Behavioral Sciences	6 Total		
(One course required. Select second course)			
Required:			
ECO 251 Prin of Microeconomics	3	NONE	_____
Choose one:			
HIS 111 World Civilizations I	3	NONE	_____
HIS 112 World Civilizations II	3	NONE	_____
HIS 131 American History I	3	NONE	_____
HIS 132 American History II	3	NONE	_____
POL 120 American Government	3	NONE	_____
PSY 150 General Psychology	3	NONE	_____
SOC 210 Introduction to Sociology	3	NONE	_____

IV. Mathematics	12 Total		
MAT 271 Calculus I	4	MAT 172	_____
MAT 272 Calculus II	4	MAT 271	_____
MAT 273 Calculus III	4	MAT 272	_____

V. Natural Science	12 Total		
CHM 151 General Chemistry I	4	NONE	_____
PHY 251/252 General Physics I & II	8	(co req. MAT 272) MAT 271 PHY 251	_____

VI. Additional general education requirements
 (Select 3-4 credit hours from courses listed on back in general education section)
 *Students should select these courses based on their intended major and Transfer University.

VII. Other Required Hours	9 Total		
Academic Transition			
ACA 122 College Transfer Success	1	NONE	_____
Engineering Core Courses:			
EGR 150 Introduction to Engineering	2	NONE	_____
DFT 170 Engineering Graphics	3	NONE	_____
(Select one course from the following)			
EGR 220 Engineering Statics	3	PHY 251 & MAT 271	_____
EGR 212 Logic System Design I	3	PHY 251 & MAT 271	_____

VIII. **Other Pre-major elective requirements**

(Select 6-8 credit hours from courses listed on back in other required section)

*Students should select these courses based on their intended major and transfer university.

Total Hours

60/63

- I. **GRADUATION REQUIREMENTS:** You must complete an Application for Graduation during the first ten days of the semester you are graduating. Please check with receiving institution for additional transfer requirements and policies such as foreign language, health and physical education requirements.

General Education Requirements

BIO 111 General Biology I (4)
 CHM 152 General Chemistry II (4)
 COM 110 Introduction to Comm. (3)
 ECO 252 Prin of Macroeconomics (3)
 GEL 111 Geology (4)
 HUM 110 Technology and Society (3)

**Other Pre-Major Electives
 Mechanical/Civil Engineering:**

Course	Notes	Credit Hours	Pre-Requisites	Co-Requisites
CSC 134 - C++ Programming	NC State only accepts CSC 134	3	None	None
CSC 151 - JAVA Programming	ECU will accept either CSC 134 or CSC 151	3	None	None
HUM 110 Technology and Society		3	None	None
MAT 280 Linear Algebra	ECU requires both MAT 280 and MAT 285	3	MAT 271	None
MAT 285 Differential Equations	NC State requires MAT 285 for Mechanical Engineering	3	MAT 272	None

Electrical/Computer Engineering:

Course	Notes	Credit Hours	Pre-Requisites	Co-Requisites
CSC 134 - C++ Programming	ECU requires either CSC 134 or CSC 151	3	None	None
CSC 151 - JAVA Programming		3	None	None
HUM 110 Technology and Society		3	None	None
MAT 280 Linear Algebra	ECU requires both MAT 280 and MAT 285	3	MAT 271	None
MAT 285 Differential Equations		3	MAT 272	None

Chemical/Biomedical Engineering:

Course	Notes	Credit Hours	Pre-Requisites	Co-Requisites
CHM 152 - General Chemistry II		4	CHM 151	None
CHM 251 – Organic Chemistry I	Required for NC State Chemical Engineering	4	CHM 152	None
CSC 134 - C++ Programming	ECU Biomedical Engineering requires either CSC 134 or CSC 151	3	None	None
CSC 151 - JAVA Programming		3	None	None
MAT 280 Linear Algebra	ECU Biomedical Engineering requires both MAT 280 and MAT 285		MAT 271	None
MAT 285 Differential Equations	NC State Chemical Engineering requires MAT 285	3	MAT 272	None
HUM 110 Technology and Society		3	None	None