

2019-2020 Pathway for Bachelor of Science in Biological Engineering (Bioprocess Engineering Track)

Please see your academic advisor to develop your individual plan. This is only meant to be a guide.

A maximum of 64 hours is transferable from a North Carolina Community College.

Freshman/First Year							
First Semester - Fall				Second Semester - Spring			
CC Course	N.C. A&T Equivalent	Credit Hours	Required/Notes	CC Course	N.C. A&T Equivalent	Credit Hours	Required/Notes
	GEEN 111	1			BIOE 121	1	
ENG 111	ENGL 100	3	UGETC: Eng Comp	ENG 112	ENGL 101	3	UGETC: Eng Comp
CHM 151	CHEM 106	3	UGETC: Nat. Sci.	MAT 272	MATH 132	4	GEN ED: Math
	CHEM 116	1		PHY 251	PHYS 241	3	UGETC: Nat. Science
MAT 271	MATH 131	4	UGETC: Math		PHYS 251	1	
EGR 150	GEEN 100	2	Pre-major Elective	CHM 152	CHEM 107	3	UGETC: Nat. Science
						CHEM 117	
Total Credit Hours		14		Total Credit Hours		16	

Sophomore/Second Year							
Third Semester - Fall				Fourth Semester - Spring			
CC Course	N.C. A&T Equivalent	Credit Hours	Required/Notes	CC Course	N.C. A&T Equivalent	Credit Hours	Required/Notes
	MEEN 230	3		See notes below ²	AA Studies, Elective	3	
MAT 273	MATH 231	4	GEN ED: Math	BIO 111	BIOL 101	4	UGETC: Nat. Science
PHY 252	PHYS 242	3	UGETC: Nat. Sci.	EGR 225	CAEE 334	2	Pre-major Elective
	PHYS 252	1			MATH 341	3	Pre-major Elective
See notes below ¹	Humanities Elective	3			CHEM 221	3	
	GEEN 161	2			CHEM 223	1	
	BIOE 200	1					
Total Credit Hours		17		Total Credit Hours		16	

Junior/Third Year							
Fifth Semester - Fall				Sixth Semester - Spring			
CC Course	N.C. A&T Equivalent	Credit Hours	Required/Notes	CC Course	N.C. A&T Equivalent	Credit Hours	Required/Notes
	CHEN 200	4		Global Studies Elective	Global Studies Elective	3	
	CAEE 362	3			BIOL 221	4	
	ISEN 260	2			MEEN 260	2	
	MEEN 240	3			BIOE 320	3	
	BIOE 340	3			BIOE 350	3	
Total Credit Hours		15		Total Credit Hours		15	

Senior/Fourth Year							
Seventh Semester - Fall				Eighth Semester - Spring			
CC Course	N.C. A&T Equivalent	Credit Hours	Required/Notes	CC Course	N.C. A&T Equivalent	Credit Hours	Required/Notes
MAT 152	Statistics Elective	3	UGETC: Math		BIOE 425	3	
	BIOE 422	3			BIOE 423	3	
	ECEN 340	3			BIOE 496	2	
	BIOE 434	4			BIOE Elective	3	
	BIOE 495	2		See notes below ⁴	Soc/Behav Sci, Elective	3	
	CAEE 400	1					
Total Credit Hours		13		Total Credit Hours		14	

Total Required Hours: 120

¹Humanities Elective- Select one of the following: HUM 110, HUM 130, HUM211, HUM 212, HUM 240, ENG 261, ENG 262, ENG 273, MUS 110, PHI 210, REL 110, PHI 240, COM 110, **or** COM 111

²AA Elective- Select one of the following: ENG 273, HIS 221, HIS 222, **or** HIS 223.

³Global Studies Elective- Select one of the following: HIS 111, HIS 112, HIS 121, HIS 122, BUS 240, **or** REL 110.

⁴Social/Behavioral Science Elective- Select one of the following: BUS 125, ECO 251, ECO 252, HIS 131, HIS 132, HIS 221, HIS 222, HIS 223, HIS 112, HIS 122, POL 120, PSY 150, SOC 210, ANT 210, **or** HEA 110.

MAJOR PROGRAM REQUIREMENTS

Students must earn a C or better in the following courses:

BIOE 330	CAEE 334	MEEN 313
BIOE 423	CAEE 362	GEEN 100
BIOE 495	CHEM 106	ISEN 260
BIOE 496	CHEM 107	ECON 305
CAEE 304	ECEN 340	MATH 131
MATH 132	MATH 231	PHYS 241
MATH 224	MATH 341	PHYS 242
		ISEN 370

All of your GEN ED and UGETC requirements are satisfied, if you have earned an Associate in Arts or Associate in Science Degree from a North Carolina Community College.