

B.S in Biology: Biotechnology Emphasis (BBTE) 2024-2025

Freshman Year 2024-2025						
Fall				Spring		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
UNV 1000	Freshman Seminar	1		ENG 1060	Composition II	3
ENG 1050	Composition I	3		CHM 1300	General Chemistry	3
BIO 1000* (C or higher required)	Principles of Biology	3		CHM 1100	General Chemistry Laboratory I	1
BIOL 1000	Laboratory Investigations and Experiences in General Biology	1		MAT 1070 or MAT 1090	College Algebra or Precalculus	3 or 4
General Education	Social Science	3		General Education	Elective	3
University Wide Elective ³		3		University Wide Elective ³		3
General Education	Physical Education	1				
Total Credits		15		Total Credits		16-17

Sophomore Year 2025-2026						
Fall				Spring		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
BIO 1010 or BIO 1020	General Botany or General Zoology	4		MAT 2100	Introduction to Statistics	3
CHM 1310	General Chemistry II	3		BIO 1010 or BIO 1020	General Botany or General Zoology	4
CHM 1110	General Chemistry Laboratory II	1		Biotech Emphasis Elective ²		3-4
BTEC 3220 (Fall Odd years only)	Biotechnology I	4		General Education	Social Science	3
General Education	Literature	3		University Wide Elective ³		3
Total Credits		15		Total Credits		16-17

*****ALL GENERAL EDUCATION COURSES CAN BE INTERCHANGED*****

¹C or higher is required in BIO 1000 to matriculate to other BIO Courses in the major.

²Biotech Emphasis Electives (4 courses required, 12-16 hrs): BIO 3750, 3810, 4130*, BTEC 3510*, 4300*, BTES 4xxx, CHM 2270, CHM 2500 & 2520, CHM 3110 & 3120, PHY 1500 & 1560, PHY 1510 & 1570.

*if not taken in junior year as required BTEC elective option

³Optional: We recommend that students consolidate their University Electives for a Minor in Bus. Adm. (18 hrs) ACC 1020, BLAW 2150, MGT 3060, MKT 3120, FIN 2400, ECN 1000 or 2020 or 2030

QPA Requirements for Baccalaureate Graduation: "Have a minimum overall cumulative quality point average of 2.0 and have a minimum cumulative quality point average of 2.0 in all work attempted at the University of North Carolina at Pembroke; Have a minimum overall cumulative quality point average of 2.0 in the major field of study"

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Junior Year 2026-2027						
Fall				Spring		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
MAT 2150 or MAT 2210	Calculus with applications or Calculus I	4		BIO 2180	Principles of Genetics	4
BIO 3040	Principles of Ecology	4		MAT 2220	Calculus II	4
Biotech Emphasis Elective ²		3-4		BIO 3150	Microbiology	4
General Education	Fine Arts	3		Required BTEC elective 3510 or 4300 (<i>spring only</i>) or BIO 4130 (<i>summer only</i>)		3-4
General Education	Physical Education	1				
Total Credits			16	Total Credits		
				15-16		

Senior Year 2027-2028						
Fall				Spring		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
BIO 3710 (WE)	Cell Biology	4		BTEC 4900 <i>Taken in last summer</i>	Internship	3
BIO 4700 (WD)	Reading and Writing in the Natural Sciences	3		Biotech Emphasis Elective ²		3-4
Biotech Emphasis Elective ²		3-4		University Wide Elective ³		3
General Education	Philosophy and Religion	3		General Education	History	3
University Wide Elective ³		3		General Education	Social Science	3
Total Credits			16-17	Total Credits		
				15-16		

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