

Bachelor of Science - Biotechnology Major (Four Year Plan)

YEAR 1

Semester 1		Semester 2	
Course Number	Credit Hours	Course Number	Credit Hours
ENG 1301 (Composition I)[#] P: One of the following: (1) TSI ESSAY score of 4 and WRITING score of 340, (2) TSI ESSAY score of 5 and ABE WRITING diagnostic level 4, (3) TSI WRITING complete, OR (4) TSI WRITING exempt	3	ENG 1302 (Composition II) P: A grade of C or better in ENG 1301 or placement by examination	3
*BIOL 1301/1101 (General Biology I w/ Lab)^{&} P: Credit or enrollment in ENG 1301 (or 010 core complete) and MATH 1301	4	*BIOL 1302/1102 (General Biology II w/ Lab)^{&} P: BIOL 1301 and BIOL 1101	4
*MATH 2411 (Calculus I for Natural Sciences)^{#&} P: C or better in MATH 1404 or MATH 1505 or placement by exam taken at UHD (can be substituted with MATH 2401)	4	*CHEM 1307/1107 (General Chemistry I w/ Lab) P: Credit or enrollment in MATH 1301, ENG 1301 (or 010 core complete), and one year of HS chemistry OR CHEM 1305/1105	4
UHD 1303 (Freshman Seminar – Life and Physical Sciences) Transfer students see advisor for options	3	MATH 2412 (Calculus II for Natural Sciences)[#] P: C or better in MATH 2411 or MATH 2401 (can be substituted with CS 1408 or CS 1410)	4
Total Semester Hours	14	Total Semester Hours	15

YEAR 2

Semester 3		Semester 4	
Course Number	Credit Hours	Course Number	Credit Hours
*CHEM 1308/1108 (General Chemistry II w/ Lab)^{&} P: Grade of C or better in CHEM 1307/1107	4	*MBIO 2305/2105 (General Microbiology w/ Lab) P: BIOL 1302/1102 and CHEM 1308/1108	4
*PHYS 1307/1107 (General Physics I w/ Lab) P: Credit or enrollment in MATH 1302 or the equivalent (can be substituted with PHYS 2401/2101)	4	PHYS 1308/1108 (General Physics II w/ Lab) P: PHYS 1307/1107 (can be substituted with PHYS 2402/2102)	4
POLS 2306 (Texas Government) P: Enrollment in or completion of ENG 1301 or 010 core complete	3	*BIOL 2303/2103 (General Genetics w/ Lab) P: BIOL 1302/1102 and CHEM 1308/1108	4
Approved Language, Philosophy, and Culture course (p. 60) P: Refer to catalog	3	Approved Creative Arts course (p. 60) P: Refer to catalog	3
Total Semester Hours	14	Total Semester Hours	15

YEAR 3

Semester 5		Semester 6	
Course Number	Credit Hours	Course Number	Credit Hours
BIOL 3330/3130 (Plant Bio w/ Lab) P: BIOL 1302/1102 and CHEM 1308/1108 (can be substituted with BIOL 3340/3140)	4	Foundational Content Course 1 See catalog for options	3
*CHEM 2301/2101 (Organic Chemistry I w/ Lab) P: C or better in CHEM 1308/1108	4	Foundational Content Course 2 See catalog for options	3
Approved Social and Behavioral Sciences course (p. 60) P: Refer to catalog	3	CHEM 4340/4140 (Biochemistry I w/ Lab) % P: BIOL 1302/1102 and CHEM 2301/2101	4
Approved American History course (p. 60) P: Enrollment in or completion of ENG 1301 or 010 core complete	3	STAT 3311 (Statistical Analysis for Natural Science) P: A grade of C or better in MATH 1404 or MATH 1505	3
POLS 2305 (Federal Government) P: Enrollment in or completion of ENG 1301 or 010 core complete	3	Approved American History course (p. 60) P: Enrollment in or completion of ENG 1301 or 010 core complete	3
Total Semester Hours	17	Total Semester Hours	16

YEAR 4

Semester 7		Semester 8	
Course Number	Credit Hours	Course Number	Credit Hours
Focus Content Course 1 See catalog for options	3	Focus Content Course 2 See catalog for options	3
Chemistry and Mathematics Content Course 1 See catalog for options	3	Chemistry and Mathematics Content Course 2 See catalog for options	3
BIOL 4220 (Introduction to Genomics and Bioinformatics) P: MATH 1404 and BIOL 2303/2103 (can be substituted with BIOL 4330)	2	BIOL 4311 (Biology Seminar) % P: Senior standing and majoring in an area of life science (can be substituted with MBIO 4311)	3
Approved Oral Communication course (p. 60) P: Refer to catalog	3	BIOL 4232 (Cell Biology Laboratory) P: One of following: BIOL 3103 or CHEM 4140 (can sub. with BIOL 4230)	2
Technical Writing Course % TCOM 3302, 3325, 3326, 3329, or 4306 P: Refer to catalog	3	Free Elective (if needed)	4
Total Semester Hours	14	Total Semester Hours	15

Total Credit Hours Required 120

* Critical course required to stay on track within major and take subsequent courses

Students are expected to place into ENG 1301 and MATH 2401 via CLEP or Bypass exams – placement tests determine which english or math course students should start with and additional courses may be necessary

& Satisfies both common core and major requirement/prerequisite

% Satisfies both major requirement/prerequisite and integrated requirement course