

UNIVERSITY STUDIES - BS, BIOMEDICAL SCIENCES CONCENTRATION

This program provides a flexible biomedical foundation, allowing tailored interdisciplinary study and preparing students for multiple career and graduate opportunities.

Students who earn a Bachelor of Science (BS) in University Studies with a concentration in Biomedical Sciences, are able to tailor their undergraduate coursework to align with future personal and career objectives. Specific requirements, course offerings, and restrictions exist for this degree.

The degree program offers a number of unique features:

- **Foundational knowledge:** The biomedical sciences concentration provides students with a firm grasp of the basic aspects of biomedical sciences including biology, chemistry, and biochemistry.
- **Interdisciplinary study:** Students pursue two minors that involve coursework in other Texas A&M colleges and departments. Students are encouraged to identify minors that complement the biomedical sciences concentration and reflect their individual interests and strengths.
- **Flexibility for the future:** Students who earn this degree find they have flexible options after graduation since they are prepared to pursue a wide range of careers and graduate programs.

The University Studies degree format was created to provide students the flexibility to combine areas of study that are of special interest.

Program Requirements

First Year

Fall		Semester Credit Hours
BIMS 101	Introduction to Biomedical Sciences	1
BIOL 111	Introductory Biology I	4
CHEM 119	Fundamentals of Chemistry I	4
Mathematics ^{1,2}		3-4
Social and behavioral sciences (https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences)		3
Semester Credit Hours		15
Spring		
BIOL 112	Introductory Biology II	4
CHEM 120	Fundamentals of Chemistry II	4
Select one of the following:		3
ENGL 103	Introduction to Rhetoric and Composition	
ENGL 104	Composition and Rhetoric	
ENGL 203	Writing about Literature	
ENGL 210	Technical and Professional Writing	
Mathematics ^{1,2}		3-4
Semester Credit Hours		14

Second Year

Fall		
Select one of the following:		4
CHEM 227 & CHEM 237	Organic Chemistry I and Organic Chemistry Laboratory	
CHEM 257	Organic Chemistry I - Structure and Function	
American history (https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) ³		3
Creative arts (https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts)		3
Government/Political science (https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science) ³		3
Directed electives ⁴		3

Semester Credit Hours 16

Spring		
BIMS 250	Professionalism, Skill Development, Career Exploration, and Ethical Conduct in BIMS	1
American history (https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) ³		3
Government/Political science (https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science) ³		3
Language, philosophy and culture (https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture)		3
Directed electives ⁴		4

Semester Credit Hours 14

Third Year

Fall		
VTPB 421	Infectious Diseases of Humans and Animals	3
Directed electives ⁴		3
General electives ⁵		9

Semester Credit Hours 15

Spring		
BIMS 320/ GENE 320	Biomedical Genetics	3
Communication (https://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication)		3
Directed electives ⁴		3
General electives ⁵		6

Semester Credit Hours 15

Fourth Year

Fall		
General electives ⁵		15

Semester Credit Hours 15

Spring		
Directed electives ⁴		3

General electives ⁵	13
Semester Credit Hours	16
Total Semester Credit Hours	120

Students must complete 36 hours 300/400 level coursework in residency at TAMU.

¹ Complete 6-8 hours of mathematics core courses as follows:

- Select one of the following: MATH 142, MATH 147, MATH 151, MATH 171.
- Select one of the following: MATH 140, MATH 148, MATH 150, MATH 152, MATH 172, STAT 201.

² Must make a grade of C or better.

³ Completion of four semesters of upper-level ROTC may be substituted for 3 hours of American history and 3 hours of political science.

⁴ Select from ANSC 107, ANSC 108, ANSC 210, ANSC 303, ANSC 318, ANSC 320, ANSC 326/FSTC 326, ANSC 327/FSTC 327; BICH 409, BICH 410, BICH 411, BICH 412, BICH 414, BICH 431/GENE 431, BICH 432/GENE 432; BIMS 101, BIMS 110, BIMS 125, BIMS 201, BIMS 250, BIMS 289, BIMS 291, BIMS 303, BIMS 380, BIMS 402/VIBS 402, BIMS 405/GENE 405, BIMS 421/GENE 421, BIMS 481, BIMS 484, BIMS 485, BIMS 489, BIMS 491, BIMS 499; BIOL 401, BIOL 402, BIOL 403; CHEM 258; COMM 370; ENTO 208, ENTO 209, ENTO 210, ENTO 423, ENTO 425, ENTO 427, ENTO 431/FIVS 431, ENTO 432/FIVS 432; MKTG 443/PHLT 426; NUTR 222; POSC 454; URPN 370; VIBS 111, VIBS 201/NRSC 201, VIBS 204, VIBS 210, VIBS 211, VIBS 222, VIBS 243, VIBS 277, VIBS 285, VIBS 289, VIBS 305, VIBS 310, VIBS 311, VIBS 343, VIBS 401/NRSC 401, VIBS 407/NRSC 407, VIBS 408, VIBS 411, VIBS 413, VIBS 422, VIBS 424/VTPP 424, VIBS 426/ENTO 426, VIBS 443, VIBS 445, VIBS 446, VIBS 447, VIBS 450, VIBS 456, VIBS 485, VIBS 489, VIBS 491; VLCS 422, VLCS 485, VLCS 491; VSCS 485, VSCS 491; VTPB 212, VTPB 221, VTPB 285, VTPB 289, VTPB 301/RWFM 309, VTPB 303, VTPB 407, VTPB 408, VTPB 409, VTPB 410, VTPB 411, VTPB 415, VTPB 425, VTPB 426, VTPB 438, VTPB 460, VTPB 485, VTPB 487, VTPB 489, VTPB 491; VTPP 123, VTPP 207, VTPP 208, VTPP 223, VTPP 224, VTPP 234, VTPP 235, VTPP 281, VTPP 285, VTPP 289, VTPP 291, VTPP 330, VTPP 401/BMEN 400, VTPP 404, VTPP 405, VTPP 420, VTPP 423, VTPP 425, VTPP 427, VTPP 438, VTPP 444, VTPP 452, VTPP 481, VTPP 485, VTPP 489, VTPP 491.

⁵ Includes 30-36 hours used to satisfy the two minor requirements and 7-13 hours any 100-499 course not used elsewhere (except MATH 102); only 1 KINE 199 may be used in this area.

No more than 9 hours combined of 291, 285, 491, 485 may be included as part of the 120 total hours required by the degree plan. No more than 6 hours of BIMS 484 may be used. Restriction to be enforced by the BIMS advising office.

All students are required to complete 3 hours of International and Cultural Diversity (<https://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) credit (ICD) and 3 hours of Cultural Discourse (<https://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>) (CD) credits. A course satisfying a core category, a college department requirement, or a free elective can be used to satisfy this requirement. Select in consultation with academic advisor.

Graduation requirements require two courses with the (UWRT) Writing Intensive or 1 course with the Writing Intensive (UWRT)/1 course Oral communication (UCRT) attribute. Consult your academic advisor for choices. These credits may come from the concentration field of study or the minor areas.