

# Bachelor of Science CHEMISTRY/Bio-Chemistry

Degree Map | 2019-2020

	YOUR CLASS	ACADEMIC	ENRICHING	LIFELONG
	SCHEDULE	ADVISING	EXPERIENCES	SUCCESS
Freshman	-Enroll in General Chemistry I and General Chemistry II series -Focus on English and Math General Education Courses -Enroll in 15-18 credit hours Fall and Spring semester if possible, and 3-6 credit hours during the Summer term.	-Make appointment with Academic Advisor each semester -Attend UTPB workshops - Review your degree map and plan your college experience -Meet your Faculty Mentor	<ul> <li>Prioritize Your Wellness</li> <li>Participate in campus recreation</li> <li>Attend Financial Literacy seminars</li> <li>Form healthy study habits</li> <li>Build Your Community</li> <li>Use FalconLink &amp; attend Club Day</li> <li>Volunteer</li> <li>Attend campus events</li> <li>Explore Your World</li> <li>Attend an athletics event, musical performance, or visit the art gallery</li> </ul>	Build Your Brand         • Draft your resume         • Register for the Job Board         • Attend Undergraduate Research         Day         Craft Your Future         • Explore career options         • Complete Chemical Safety/Lab         Training         • Have coffee with a faculty         member
Sophomore	-Enroll in Organic Chemistry I and Organic Chemistry II series -Enroll in Introduction to Research -Enroll in 15-18 credit hours Fall and Spring semester, and 3-6 credit hours during the Summer term.	<ul> <li>Make appointment with Academic Advisor each semester</li> <li>Participate in academic advising with Chemistry faculty member each semester</li> <li>Complete requirements to successfully pass Sophomore Music Barrier</li> </ul>	<ul> <li>Prioritize Your Wellness</li> <li>Enjoy outdoor spaces on campus</li> <li>Build Your Community</li> <li>Join an organization (ex: ACS)</li> <li>Explore campus leadership (SGA, Orientation Leader, Resident Asst.)</li> <li>Participate in STEM activities on/off campus</li> <li>Become a Peer Leader or Mentor</li> <li>Explore Your World</li> <li>Consider study abroad</li> <li>Attend UTPB Chemistry workshops and visiting lectures</li> </ul>	<ul> <li>Build Your Brand</li> <li>Update your resume</li> <li>Join LinkedIn</li> <li>Consider student employment</li> <li>Apply for Undergraduate</li> <li>Research Program</li> <li>Craft Your Future</li> <li>Participate in mock interviews</li> <li>Attend an internship/career fair</li> </ul>
Junior	<ul> <li>Enroll in Analytical Chemistry</li> <li>Enroll Continue Introduction to Research</li> <li>Complete General Education Requirements</li> <li>Enroll in 12-16 credit hours Fall and Spring semester</li> </ul>	-Make appointment with Faculty Mentor before registration -Complete General Education Core -Complete College of Education Pre-requisite courses with GPA requirements. -Enroll in Chemistry Electives	<ul> <li>Prioritize Your Wellness</li> <li>Attend a health fair</li> <li>Build Your Community</li> <li>Run for organization officer role</li> <li>Apply to be a Chemistry Ambassador</li> <li>Apply to Gamma Sigma Epsilon Xi</li> <li>Zeta Chemistry Honor Society</li> <li>Explore Your World</li> <li>Consider study abroad</li> <li>Participate in service learning</li> </ul>	<ul> <li>Build Your Brand</li> <li>Update your resume</li> <li>Participate in Summer Research (REU, LSAMP, etc.)</li> <li>Attend Seminar on Professional Oral and Poster Presentations</li> <li>Present Research at a National ACS Meeting</li> <li>Craft Your Future</li> <li>Search for internships or fellowships</li> <li>Attend National and Regional Scientific Conferences</li> </ul>
Senior	-Complete Introduction to Research -Enroll in Physical Chemistry I Series -Enroll in Inorganic Chemistry -Enroll in 12-16 credit hours Fall and Spring semester	-Complete Degree Plan Completion Audit -Complete research hours, volunteering in schools -Participate in recruiting activities with Chemistry Faculty	<ul> <li>Prioritize Your Wellness</li> <li>Attend financial literacy seminars</li> <li>Build Your Community</li> <li>Attend your ring ceremony</li> <li>Join Alumni Association upon graduation</li> <li>Explore Your World</li> <li>Consider study abroad (summer prior to senior year)</li> </ul>	<b>Build Your Brand</b> • Update your resume • Develop & present research <b>Craft Your Future</b> • Participate in an internship or fellowship • Apply to Graduate/Professional School • Attend GSE Binational Meeting Chemistry Club

# UTPB students will graduate with these skills:

- Strong background in Chemical Knowledge
- Competency and Safety Laboratory Practices
- Personal and Social Responsibility
- Oral and Written Communication
- Independent Problem Solving
- Quantitative and Qualitative Analysis
- Team Work
- Leadership

# Career opportunities:

- Industry
  Pharmacy
  Clinical Research
  Petroleum analysis and refining
- •Government •Forensics
- •Higher Education
- •Entropropour
- •Entrepreneur

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# **BACHELOR OF CHEMISTRY Biochemistry Track**

#### Semester 1

CHEM 1311/1311W/1111 General Chemistry I Series UNIV 1101 Freshman Seminar ENGL 1301 Composition I MATH 2412 Pre-calculus *OR* MATH 2413 Calculus I COMM 1301 Intro to the Study of Communication HIST 1301 American History I

18 hours

### Semester 2

CHEM 1312/1312W/1112 General Chemistry II Series ARTS 1301 Arts Appreciation *OR* MUSI 1301 Jazz, Pop, and Rock ENGL 1302 Composition II HIST 1302 American History II

14 hours

#### Semester 3

CHEM 3311/3113 Organic Chemistry I Series Phys 2325/2125 University Physics I Series PLSC 2305 American National Politics BIOL 1306/1106 General Biology I Series COMM 1301 Intro to the Study of Communication *OR* PHIL 2300 Introduction to Philosophy **18 hours** 

#### Semester 4

CHEM 3312/1112 Organic Chemistry II Series Phys 2326/2126 University Physics II Series PLSC 2306 State and Local Politics BIOL 1306/1107 General Biology II Series

16 hours

## Semester 5 CHEM 3324/3125 Analytical Chemistry I Series BIOL 3300/3101 Microbiology COMM 1315 Intro to Public Speaking MATH 2413 Calculus I PSYC 1301 Introduction to Psychology

18 hours

#### Semester 7

CHEM 4301/4103 Physical Chemistry I Series CHEM 4321/4223 Biochemistry CHEM 4330/4131 NMR Spectroscopy CHEM 3695 Intro to Research

13 hours

### Semester 6

CHEM 4313 Instrumental Chemical Analysis OR CHEM 4389 Special Topics in Chemistry CHEM 4340 Medicinal Chemistry CHEM 4374/4175 Inorganic Chemistry Series (Even Year) BIOL 3324/3125 Cell Biology Series OR BIOL 4303 Nutrition

#### 13 hours

### Semester 8

CHEM 4322 Biochemistry II CHEM 3695 Intro to Research CHEM 4389 Special Topics in Chemistry – Polymer Chemistry BIOL 4340/4141 Genetics

12 hours