The University of Texas at Tyler **2016-18**

COLLEGE OF ARTS AND SCIENCES

Bachelor of Science in Chemistry (ACS-Certified) – Teacher Certification Option

The chemistry program offers the student an opportunity to gain an appreciation of the chemical world, to develop an inquisitive nature, to train in the use of the scientific method, to prepare for entry into industry or one of the medical professions, to train as a prospective teacher, and to prepare for advanced study. The chemistry curriculum is designed to accomplish the above objectives through contact with specific chemistry content, exposure to laboratory experiences, and encouragement of the creative process and independent research. The degree program is flexible so that an individual can best prepare for his specific career. Students are encouraged to choose supporting work and electives which reinforce their knowledge of chemistry.

Recommended 4-Year Curriculum

FRESHMAN YEAR

First Semester			Credit Hours
BIOL	1306	General Biology I	3
BIOL	1106	General Biology I Lab	1
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry I Lab	1
ENGL	1301	Grammar & Composition I	3
MATH	2413	Calculus I	4
EDUT	1170	Step 1: Inquiry Approach	1
		Total Semester Hours	**16**

Second Semester			Credit Hours
BIOL	1307	General Biology II	3
BIOL	1107	General Biology II Lab	1
CHEM	1312	General Chemistry II	3
CHEM	1112	General Chemistry II Lab	1
ENGL	1302	Grammar & Composition II	3
MATH	2414	Calculus II	4
EDUT	2170	Step 1: Inquiry Based Learning	1
		Total Semester Hours	**16**

SOPHOMORE YEAR

First Semester			Credit Hours
CHEM	3342	Organic Chemistry I	3
CHEM	3143	Organic Chemistry I Lab	1
PHYS	1301	College Physics I	3
PHYS	1101	College Physics I Lab	1
_____	_____	*Language/Philosophy/Culture	3
EDUT	3370	Knowing and Learning	3
		Total Semester Hours	**14**

Second Semester			Credit Hours
CHEM	3344	Organic Chemistry II	3
CHEM	3145	Organic Chemistry II Lab	1
PHYS	1302	College Physics II	3
PHYS	1102	College Physics II Lab	1
POLS	2306	Intro. Texas Politics	3
EDUT	3371	Classroom Interactions	3
		Total Semester Hours	**14**

JUNIOR YEAR

First Semester			Credit Hours
CHEM	3310	Analytical Chemistry	3
CHEM	3311	Analytical Chemistry Lab	1
CHEM	3352	Physical Chemistry I	3
CHEM	3153	Physical Chemistry I Lab	1
_____	_____	*Social/Behavioral Science	3
CHEM	3360	Research Methods	3
		Total Semester Hours	**14**

Second Semester			Credit Hours
CHEM	3320	Inorganic Chemistry	3
CHEM	3121	Inorganic Chemistry Lab	1
CHEM	_____	†Advanced Chemistry Electives	4
CHEM	_____	†Advanced Chemistry Elective	3
CHEM	3370	Perspectives on Math and Sci	3
		Total Semester Hours	**14**

SENIOR YEAR

First Semester			Credit Hours
CHEM	4330	†Advanced Inorganic Chemistry	3
CHEM	4334	Biochemistry	3
CHEM	4135	Biochemistry Lab	1
CHEM	_____	†Advanced Chemistry Elective	3
SPCM	1315	Speech Communications	3
EDUT	4370	Project-Based Instruction	3
		Total Semester Hours	**16**

Second Semester			Credit Hours
EDUC	4640	Student Teaching	6
EDUC	4171	Apprentice Teaching Seminar	1
		Total Semester Hours	**7**

Total hours must equal at least 120 hours, including 42 upper-division hours

NOTES:

*See UT Tyler Core Curriculum for approved course. Other required core courses not listed above (POLS 2305, HIST 1301, HIST 1302, and a Creative Arts course) may need to be taken during summer or other short semesters.

Advanced Chemistry Electives: CHEM 3354/3155, CHEM 4312/4113, CHEM 4330, CHEM 4336, CHEM 4240, CHEM 4346, and CHEM 4191.

The Department of Chemistry & Biochemistry's chemistry program is approved by the American Chemical Society (ACS). Students who receive a Bachelor of Science degree in chemistry and complete the ACS-approved curriculum will graduate as ACS-certified chemists.

This is only a recommended outline. Because degree requirements do change, you should consult an advisor as well as the University Catalog, which is the only official document regarding baccalaureate degree requirements.