

COLLEGE OF ARTS AND SCIENCES

Bachelor of Science in Chemistry

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	Second Semester			Credit Hours
CHEM	1311	General Chemistry I	3	CHEM	1312	General Chemistry II	3
CHEM	1111	General Chemistry I Lab	1	CHEM	1112	General Chemistry II Lab	1
BIOL	1306	General Biology I	3	BIOL	1307	General Biology II	3
BIOL	1106	General Biology I Lab	1	BIOL	1107	General Biology II Lab	1
UNIV	1300	Freshman Seminar	3	ENGL	1301	Grammar & Composition I	3
MATH	2413	Calculus I	4	MATH	2414	Calculus II	4
Total Semester Hours			15	Total Semester Hours			15

SOPHOMORE YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
ENGL	1302	Grammar & Composition II	3	CHEM	3344	Organic Chemistry II	3
CHEM	3342	Organic Chemistry I	3	CHEM	3145	Organic Chemistry II Lab	3
CHEM	3143	Organic Chemistry I Lab	1	PHYS	2326	University Physics II	3
PHYS	2325	University Physics I	3	PHYS	2126	University Physics II Lab	1
PHYS	2125	University Physics I Lab	1	CHEM	3310	Analytical Chemistry	3
MATH	3404	Multivariate Calculus	4	CHEM	3111	Analytical Chemistry Lab	1
Total Semester Hours			15	ENGL	_____	*World/European Literature	3
Total Semester Hours			15	Total Semester Hours			15

JUNIOR YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
HIST	1301	U.S. History I	3	_____	_____	+Approved Elective	3
MATH	3203	Matrix Methods	2	CHEM	3354	Physical Chemistry II	3
CHEM	3352	Physical Chemistry I	3	CHEM	3155	Physical Chemistry II Lab	1
CHEM	3153	Physical Chemistry I Lab	1	CHEM	4334	Biochemistry	3
CHEM	3320	Inorganic Chemistry	3	CHEM	4135	Biochemistry Lab	1
CHEM	3121	Inorganic Chemistry Lab	1	CHEM	4240	Spectroscopy	2
_____	_____	*Humanities Elective	3	HIST	1302	United States History II	3
Total Semester Hours			16	Total Semester Hours			16

SENIOR YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
_____	_____	+Approved Elective	3	_____	_____	+Approved Elective	3
CHEM	4312	Instrumental Analysis	3	POLS	2306	Texas Politics	3
CHEM	4113	Instrumental Analysis Lab	1	CHEM	4191	Seminar	1
_____	_____	*Social/Behavioral Science Elec.	3	CHEM	4330	Advanced Inorganic Chemistry	3
_____	_____	*Visual/Performing Arts	3	CHEM	4346	Advanced Organic Chemistry	3
POLS	2305	American Government	3	_____	_____	+Approved Elective	3
Total Semester Hours			16	Total Semester Hours			16

Total hours must equal at least 124 hours

NOTES:

*See UT Tyler Core Curriculum for approved course(s).

+ Consult with your advisor for specific degree requirements and schedule planning.

The Department of Chemistry has a chemistry program 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.