

# Chemistry B.S. - A.C.S. Professional Degree

## A.C.S. Professional Degree

The American Chemical Society professional degree prepares students for careers in a wide variety of positions in industry, government, and education. It is recommended for those students intending to do graduate study in chemistry or seeking employment as chemists in industry. The competencies of students with this degree should meet the criteria for a professional chemist stated by the American Chemical Society.

### Core Curriculum Courses

See the Core Curriculum Requirements (<http://coursecatalog.tamuc.edu/undergrad/core-curriculum-requirements/>) 42

### Required courses in the major

CHEM 101	General Chemistry Tutorial I	1
CHEM 102	General Chemistry Tutorial II	1
CHEM 1111	General and Quantitative Chemistry Laboratory I *	
CHEM 1112	General and Quantitative Chemistry Laboratory II *	
CHEM 1311	General and Quantitative Chemistry I *	
CHEM 1312	General and Quantitative Chemistry II *	
CHEM 201	Organic Chemistry Tutorial I	1
CHEM 202	Organic Chemistry Tutorial II	1
CHEM 2123	Organic Chemistry Laboratory I	1
CHEM 2125	Organic Chemistry Laboratory II	1
CHEM 2323	Organic Chemistry I	3
CHEM 2325	Organic Chemistry II	3
CHEM 340	Quantitative & Instrumental Analysis	4
CHEM 351	Physical Chemistry	4
CHEM 352	Physical Chemistry	4
CHEM 401	GLB/Chemical Sci & Profession (2 sh required)	2
CHEM 414	Biochemistry	4
CHEM 415	Advanced Inorganic Chemistry	4
CHEM 418	Undergraduate Research (also satisfied by CHEM 490 and CHEM 491)	6
CHEM 441	Instrumental Analysis	4
Advanced CHEM course (excluding CHEM 371, CHEM 397, CHEM 490, CHEM 491 & CHEM 497, unless departmental approval granted)		3-4

### Required support courses

MATH 2413	Calculus I *	
MATH 2414	Calculus II	4
MATH 2415	Calculus III	4
PHYS 2425	University Physics I	4
PHYS 2426	University Physics II	4

**Second Major, Minor or Electives** 20

**Total Hours** 125-126

\* These courses will satisfy the Core Curriculum Requirements in Natural Sciences and Mathematics.  
A grade of "C" or higher must be earned in all courses in this Major.