

Students receiving the BS Degree in Chemistry with Teacher Certification can continue their academic studies into masters or doctoral programs in Chemistry, can use the degree to find employment as a chemist, or can enter a career as a secondary school teacher of chemistry. The Chemistry degree is certified by the American Chemical Society.

A – GENERAL EDUCATION CORE – 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education core requirements.

Required

020 - Mathematics – 3 hours

MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture

030 - Life and Physical Science - 6 hours

CHEM 1311 General Chemistry I

CHEM 1312 General Chemistry II

090 - Integrative and Experiential Learning – 2 hours

CHEM 1111 General Chemistry I Lab

CHEM 1112 General Chemistry II Lab

B – MAJOR REQUIREMENTS – 43 HOURS (31 advanced)

CHEM 2301 Analytical Chemistry
CHEM 2101 Analytical Chemistry Lab
CHEM 2323 Organic Chemistry I
CHEM 2123 Organic Chemistry I Lab
CHEM 2325 Organic Chemistry II
CHEM 2125 Organic Chemistry II Lab
CHEM 3301 Inorganic Chemistry
CHEM 3202 Inorganic Chemistry Lab
CHEM 3303 Biochemistry I
CHEM 3103 Biochemistry I Lab
CHEM 3304 Physical Chemistry I
CHEM 3104 Physical Chemistry I Lab
CHEM 3305 Physical Chemistry II
CHEM 3105 Physical Chemistry II Lab
CHEM 4101 Chemistry Seminar
CHEM 4201 Chemistry Problems I
CHEM 4304 Instrumental Analysis
CHEM 4104 Instrumental Analysis Lab
CHEM 4105 Chemistry Capstone
PHYS 3330 Functions and Modeling
PHYS 4392 Research Methods

C – SUPPORT COURSES – 16 HOURS (3 advanced)

MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
MATH 2414 Calculus II (or MATH 2488 Honors)
PHIL 3317 Perspectives on Mathematics and Science
PHYS 1401 General Physics I
PHYS 1402 General Physics II

D – UTEACH CERTIFICATION – 21 HOURS (19 advanced)

Area of Certification: Chemistry (7-12)

UTCH 1101 Inquiry Approaches to Teaching
UTCH 1102 Inquiry-Based Lesson Design
UTCH 3301 Knowing and Learning in Mathematics and Science
UTCH 3302 Classroom Interactions
UTCH 3303 Project-Based Instruction
UTCH 4601 Apprentice Teaching

UTCH 4101 Apprentice Teaching Seminar
READ 4305 Content Area Literacy

TOTAL CREDIT HOURS FOR GRADUATION – 122 HOURS

TOTAL ADVANCED HOURS – 53 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Progression requirements

Admission to the College of Education and P-16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 5 advanced hours, as recommended by advisor.

Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.