

*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 Science and Mathematics

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 2017-2019 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.