
This program leads to a profession which requires an occupational license as defined under Texas Occupations Code 58.001 This requires that all applicants seeking to become licensed must undergo a criminal background check prior to licensure. Students in this program should check with the College of Education and P-16 Integration on the requirements for a criminal background check prior to student teaching.

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 3101 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 4201 Chemistry Problems I

CHEM 4304 Instrumental Analysis

CHEM 4104 Instrumental Analysis Lab

CHEM 4305 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 Disciplinary Literacy in Content Area Classrooms

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 2018-2019 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.