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*Students receiving the BS Degree in Chemistry (Broadfield Major) can continue their academic studies into masters or doctoral programs in Chemistry or can use the degree to find employment as a chemist. This degree can also be combined with teacher certification work to enter a career as a secondary school teacher of chemistry. The Chemistry (Broadfield Major) 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 Sciences – 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 – 37 HOURS (25 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

**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)

MATH 3341 Differential Equations

PHYS 1401 General Physics I

PHYS 1402 General Physics II

**D – TECHNICAL ELECTIVES – 20 HOURS (20 advanced)**

*Complete 6 advanced hours in CHEM, and complete 14 advanced hours in one of the following areas: CHEM, BIOL, PHYS, MATH, or ENGR.*

**E – FREE ELECTIVES – 5 HOURS**

**TOTAL CREDIT HOURS FOR GRADUATION – 120 HOURS**

**TOTAL ADVANCED HOURS – 48 HOURS**

**ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:**

**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.