**General Education Core Courses Required for the Major**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>UTRGV Course Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>020</td>
<td>Mathematics*</td>
<td>MATH 2413 Calculus I</td>
</tr>
<tr>
<td>030</td>
<td>Natural Sciences</td>
<td>CHEM 1411 General Chemistry I</td>
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<tr>
<td></td>
<td></td>
<td>CHEM 1412 General Chemistry II</td>
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</tbody>
</table>

**A - General Education Core - 42 Hours**

- 42 hours of General Education Core

**B - Major Requirements - 42 Hours**

1. Core Courses for the Major - 36 Hours

   - CHEM 2423 Organic Chemistry I
   - CHEM 2425 Organic Chemistry II
   - CHEM 3301 Inorganic Chemistry I
   - CHEM 3101 Inorganic Chemistry I Lab
   - CHEM 3303 Biochemistry I
   - CHEM 3103 Biochemistry I Lab
   - CHEM 3305 Analytical Chemistry
   - CHEM 3105 Analytical Chemistry Lab
   - CHEM 3310 Physical Chemistry I
   - CHEM 3110 Physical Chemistry I Lab
   - CHEM 3312 Physical Chemistry II
   - CHEM 3112 Physical Chemistry II Lab
   - CHEM 4110 Chemistry Seminar
   - CHEM 4305 Instrumental Methods of Analysis
   - CHEM 4105 Instrumental Methods of Analysis Lab
   - CHEM 4320 Chemistry Problems

2. Chemistry Electives - 6 Hours

   - (6 hours must be advanced 3000, 4000 level)

**C - Support Courses - 19 - 20 Hours**

Choose one course:

   - PHYS 1401 College Physics I
   - PHYS 2325/2125 University Physics I/Lab I

Choose one course:

   - PHYS 1402 College Physics II
   - PHYS 2326/2126 University Physics II/Lab I

   - MATH 2413 Calculus I**
   - MATH 2414 Calculus II

Choose one course:

   - MATH 3349 Differential Equations
   - MATH 2415 Calculus III
   - COSC 1301 Introduction to Computing

**D - Electives - 16 - 17 Hours**

(16 hours if MATH 2415 or 17 hours if MATH 3349 in Support Courses)
(3 hours must be advanced 3000, 4000 level if MATH 2415 in Support Courses)

**Total Credit Hours for Graduation - 120**

**Total Advanced Hours (minimum) - 36**

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Admission requirements to this program: MATH-2413 Calculus I with “C” or better grade.

* Grade of “C” or better is required for a MATH course used to fulfill the General Education Core requirement (MATH-1314 College Algebra or higher).

** MATH 2413-3 sch for general education and 1 sch for support courses.