CHEMISTRY - BA

The Bachelor of Arts program, through the availability of a generous number of electives, gives the student a firm and broadly-based foundation in chemistry, with the option of pursuing other educational objectives involving specialization in at least one other field in depth. This objective is accomplished by means of the BA program flexibility and by the inclusion of a minor area of study in another discipline. Additional elective hours allow further diversification.

The BA degree offers somewhat more flexibility than the BS program, in terms of tailoring a program of study that combines chemistry with an interest in subject areas such as biochemistry, biology, business, computer science, education, forensics, medicine or physics. Although the BA program may in any specific case turn out to be a somewhat less technical curriculum, it meets the needs of many students who plan to use chemistry as a springboard to a career in chemical sales, marketing, law, technical writing, teaching at a pre-college level, science journalism, etc., to name only a few possibilities.

A BA degree in Chemistry coupled with a minor in Biology, or completion of a biological chemistry track, is excellent preparation for a variety of careers in the health-related disciplines. In particular, a BA degree in Chemistry is excellent and proven preparation for medical and dental schools, and affords the superior student the opportunity to maintain flexibility for a broad spectrum of medical or dental careers.

Although not required for the BA program, abundant research opportunities are available to students. The BA program also permits and encourages non-technical elective courses.

Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Credit Hours</th>
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<tbody>
<tr>
<td></td>
<td><strong>First Year</strong></td>
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<td>CHEM 100</td>
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<td>CHEM 119</td>
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<td>ENGL 104</td>
<td>Composition and Rhetoric</td>
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<td>Engineering Mathematics I</td>
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<td>MATH 152</td>
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<td>CHEM 315</td>
<td>Fundamentals of Quantitative Analysis</td>
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<td>CHEM 318</td>
<td>Quantitative Analysis Laboratory</td>
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<td>CHEM 327</td>
<td>Physical Chemistry I</td>
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<td>Creative arts (<a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts</a>)</td>
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<td>CHEM 325</td>
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<td>CHEM 328</td>
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<td>Social and behavioral sciences (<a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences</a>)</td>
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<td>CHEM 326</td>
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<tr>
<td>CHEM 362</td>
<td>Descriptive Inorganic Chemistry</td>
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<tr>
<td>CHEM 415</td>
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<tr>
<td>CHEM 446</td>
<td>Organic Chemistry III</td>
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<tr>
<td>CHEM 456</td>
<td>Chemical Biology</td>
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<tr>
<td>CHEM 462</td>
<td>Inorganic Chemistry</td>
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CHEM 231   | Techniques of Organic Chemistry                                       | 2                     |
PHYS 206   | Newtonian Mechanics for Engineering and Science                       | 3                     |
PHYS 226   | Physics of Motion Laboratory for the Sciences                         | 1                     |
POLS 207   | State and Local Government                                           | 3                     |
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) | 3                     |

Semester Credit Hours 15

Semester Credit Hours 16

Semester Credit Hours 16

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<td>CHEM 466</td>
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<td>CHEM 468</td>
<td>Materials Chemistry of Inorganic Materials</td>
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General electives 2

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**Spring**

Select one of the following: 3

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General electives 2

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<thead>
<tr>
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<th>9</th>
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**Total Semester Credit Hours** 120

1. Choose a section designated for chemistry majors.
2. Select any course 100-499 not used elsewhere except AERS 100-299 (http://catalog.tamu.edu/undergraduate/course-descriptions/aers/); CHEM 222, CHEM 242; MATH 102, MATH 140, MATH 142, MATH 167, MATH 168; MLSC 100-299 (http://catalog.tamu.edu/undergraduate/course-descriptions/mlsc/); NVSC 100-299 (http://catalog.tamu.edu/undergraduate/course-descriptions/nvsc/); PHYS 201, PHYS 202, PHYS 205. General elective hours must be used to complete a required minor approved by the granting department.
3. This is a designated C- or W-course.

Graduation requirements include a requirement for 3 hours of International and Cultural Diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) courses and 3 hours of Cultural Discourse (http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/) courses. A course satisfying a Core category, a college/department requirement, or a general elective can be used to satisfy this requirement.

Chemistry majors may take CHEM 485 or CHEM 491 as elective courses. The total hours of CHEM 485 and CHEM 491 taken on a graded (A-F) basis may not exceed 9. Additional hours of these courses may be taken on an S/U basis. A maximum of 6 hours of these courses may be included on the degree plan.

Electives should be chosen in consultation with the chemistry advisor and should be selected to meet the residency requirement (36 hours at 300-400-level must be taken at Texas A&M).