CHEMISTRY, B.S. - BIOCHEMISTRY OPTION

Major in Chemistry, BS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credits Required for Major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum GPA 2.0 for Major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum credits for 50% residency</td>
<td></td>
</tr>
</tbody>
</table>

CHEM 188 WAIVED FOR TRANSFER STUDENTS

100 AND 200 LEVEL CHEMISTRY REQUIRED COURSES 3

A grade of C or better is required in the 100/200 level courses before proceeding to the courses for which they are pre-requisites.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>Introductory Chemistry 1 (C minimum)</td>
<td></td>
</tr>
<tr>
<td>CHEM 112</td>
<td>Introductory Chemistry 2 (C minimum)</td>
<td></td>
</tr>
<tr>
<td>CHEM 231</td>
<td>Organic Chemistry 1 (C minimum)</td>
<td></td>
</tr>
<tr>
<td>CHEM 232</td>
<td>Organic Chemistry 2 (C minimum)</td>
<td></td>
</tr>
<tr>
<td>CHEM 251</td>
<td>Inorganic Chemistry 1 (C minimum)</td>
<td></td>
</tr>
<tr>
<td>CHEM 265</td>
<td>Quantitative Analysis (C minimum)</td>
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</tr>
</tbody>
</table>

300 AND 400 LEVEL CHEMISTRY REQUIRED COURSES 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 341</td>
<td>Physical Chemistry 1</td>
<td></td>
</tr>
<tr>
<td>CHEM 342</td>
<td>Physical Chemistry 2</td>
<td></td>
</tr>
<tr>
<td>CHEM 487</td>
<td>Seminar in Chemistry 1</td>
<td></td>
</tr>
<tr>
<td>CHEM 488</td>
<td>Seminar in Chemistry 2</td>
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</tr>
<tr>
<td>CHEM 498</td>
<td>Independent Study</td>
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</table>

CHEMISTRY OPTIONS

Option in Biochemistry - See separate block

American Chemical Society Certification - Optional - See separate block

Total Hours 5

American Chemical Society Certification - Optional

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credits Required for Concentration</td>
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</tr>
<tr>
<td></td>
<td>Minimum 50% Residency Credits</td>
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</tbody>
</table>

RECOMMENDED COURSES FOR ACS CERTIFICATION

Introductory Economics - Optional Recommended 0
Elementary Language German or Russian - Optional Recommended 0

Total Hours 4

Req Related for Chemistry, BS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 326</td>
<td>Biochemistry 1</td>
<td>0</td>
</tr>
<tr>
<td>CHEM 327</td>
<td>Biochemistry 2</td>
<td>0</td>
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</tbody>
</table>

MATHEMATICS

Calculus I or Honors Calculus - Choose 1 of the following: 4-5

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 161</td>
<td>Calculus 1</td>
<td>1</td>
</tr>
<tr>
<td>MATH 163H</td>
<td>Honors Calculus 1</td>
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</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>MATH 211</td>
<td>Calculus 2</td>
<td>4</td>
</tr>
<tr>
<td>MATH 311</td>
<td>Calculus 3</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 231</td>
<td>Physics 1 with Calculus</td>
<td>0</td>
</tr>
<tr>
<td>PHYS 232</td>
<td>Physics 2 with Calculus</td>
<td>0</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>General Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 364</td>
<td>Foundations of Genetics &amp; Molecular Biology</td>
<td>0</td>
</tr>
<tr>
<td>BIOLOGY RELATED ELECTIVES - Choose 1 of the following:</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>BIOL 362</td>
<td>Cell and Developmental Biology</td>
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<tr>
<td>BIOL 361</td>
<td>Microbiology</td>
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</tr>
<tr>
<td>BIOL 462</td>
<td>Molecular Biology</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours**: 12-13

It is strongly recommended that students pursuing the Bachelor of Science degree achieve competency equivalent to the first two courses in a foreign language. A course in economics is also recommended.