Accelerated B.S. Chemistry

Accelerated BS to MS Program

Students accepted into an accelerated undergraduate program may take departmentally approved graduate coursework as part of their undergraduate curriculum. These credits will count towards both their bachelor's and master's degrees and can fulfill major requirements, upper-division requirements, and/or free electives. For details on accelerated programs at Idaho State University, please see (Degree Requirements (http://coursecat.isu.edu/undergraduate/ degreerequirements/)).

Once accepted into an accelerated degree program, it is strongly recommended for students to stay in close communication with their advisor regarding pursuit of acceptance into the Graduate School and the master's degree program at Idaho State University. Acceptance into an accelerated program during the bachelor's degree program is the first step in the admissions process. A separate application to the Graduate School is necessary for all accelerated programs. For more information regarding application and admission to the Graduate School at Idaho State University, please see the Graduate Admissions section of the graduate catalog (http://coursecat.isu.edu/graduate/graduateadmissions/).

Chemistry Accelerated Criteria

Students may be admitted to the program after having completed 64 credit hours. Application for admission must be made to the Chemistry Department. Students may replace up to 6 credits of 4400-level CHEM lecture or laboratory requirements or electives (CHEM 4400, CHEM 4407, CHEM 4433, CHEM 4437, CHEM 4438, CHEM 4445, CHEM 4447, CHEM 4470, CHEM 4499) with 5500-level analogs of these courses. These credits will count simultaneously toward both BS and MS degree requirements for students in this program.

In addition, the student should have completed the following courses or their equivalent:

Program Admission Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2211</td>
<td>General Chemistry I and II with labs (CHEM 1111L, CHEM 1112, CHEM 1112L)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2232</td>
<td>General Chemistry I and II with labs (CHEM 3301, CHEM 3303, CHEM 3302, CHEM 3304)</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 2213</td>
<td>General Chemistry I and II with labs (MATH 1170, MATH 1175)</td>
<td>8</td>
</tr>
<tr>
<td>PHYS 2211</td>
<td>Calculus I and II (MATH 1170, MATH 1175)</td>
<td>10</td>
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</tbody>
</table>

Suggested Preparatory Courses

Students are encouraged, but not required, to complete the following courses prior to entering the program. These courses must be completed eventually to satisfy the BS degree requirements and also serve as prerequisites for advanced courses in the BS/MS degree.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1101 &amp; 1101L</td>
<td>Biology I and Biology I Lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Inorganic Chemistry I and Inorganic Chemistry I Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 2232</td>
<td>Quantitative Analysis and Quantitative Analysis Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>Total Credits</td>
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<td>47</td>
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</table>

Including the University General Education Requirements listed elsewhere (8 of the 9 General Education Objectives, a minimum of 36 credits--see the General Education Requirements (http://coursecat.isu.edu/undergraduate/ academicinformation/generaleducation/) in the Academic Information section of this catalog), the program of study for the Bachelor of Science in Mechanical Engineering degree totals a minimum of 120 credits as follows:

General Education

The listing below includes program requirements that also fulfill General Education requirements.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Objective 1 - ENGL 1101, ENGL 1102</td>
<td>General Education Objective 1</td>
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<tr>
<td>Objective 2 - COMM 1101</td>
<td>General Education Objective 2</td>
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</tr>
<tr>
<td>Objective 3 - MATH 1170</td>
<td>General Education Objective 3</td>
<td>4</td>
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<tr>
<td>Objective 4</td>
<td>General Education Objective 4</td>
<td>6</td>
</tr>
<tr>
<td>Objective 5 - BIOL 1101,1101L &amp; CHEM 1111L,1111L</td>
<td>General Education Objective 5</td>
<td>9</td>
</tr>
<tr>
<td>Objective 6</td>
<td>General Education Objective 6</td>
<td>6</td>
</tr>
<tr>
<td>Objective 7</td>
<td>General Education Objective 7</td>
<td>3</td>
</tr>
<tr>
<td>Objective 8</td>
<td>General Education Objective 8</td>
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<tr>
<td>Total Credits</td>
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<td>40</td>
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</table>

Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1101 &amp; 1101L</td>
<td>Biology I and Biology I Lab</td>
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</tr>
<tr>
<td>CHEM 1111 &amp; 1111L</td>
<td>General Chemistry I and General Chemistry I Lab</td>
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</tr>
<tr>
<td>CHEM 1112 &amp; 1112L</td>
<td>General Chemistry II and General Chemistry II Lab</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1170</td>
<td>Calculus I</td>
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<tr>
<td>MATH 1175</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2211</td>
<td>Engineering Physics I and Engineering Physics I Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 2212</td>
<td>Engineering Physics II and Engineering Physics II Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 2211</td>
<td>Inorganic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2213</td>
<td>Inorganic Chemistry I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 2232</td>
<td>Quantitative Analysis and Quantitative Analysis Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3301</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3303</td>
<td>Organic Chemistry Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3302</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3331</td>
<td>Instrumental Analysis and Instrumental Analysis Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3351</td>
<td>Physical Chemistry I</td>
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<tr>
<td>CHEM 3352</td>
<td>Physical Chemistry II</td>
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<tr>
<td>CHEM 3365</td>
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<td>Total Credits</td>
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Accelerated B.S. Chemistry - Accelerated B.S. Chemistry

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 4432</td>
<td>Biochemistry</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 4445 &amp; BIOL 4447</td>
<td>Biochemistry I and Biochemistry II</td>
<td>6</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 4445 &amp; CHEM 4447</td>
<td>Biochemistry I and Biochemistry II</td>
<td>6</td>
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<tr>
<td>OR</td>
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<tr>
<td>CHEM 5545 &amp; CHEM 5547</td>
<td>Biochemistry I and Biochemistry II</td>
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<tr>
<td>CHEM 4451 &amp; CHEM 4452</td>
<td>Physical Chemistry Laboratory I and Physical Chemistry Laboratory II</td>
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<td>CHEM 4485</td>
<td>Senior Research (6 credits required)</td>
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<td>CHEM 4491</td>
<td>Seminar</td>
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**Suggested Electives Eligible for 5500-level credit***

<table>
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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>CHEM 4400/5500</td>
<td>Practicum in Physical Science</td>
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<tr>
<td>CHEM 4407/5507</td>
<td>Inorganic Chemistry II</td>
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<tr>
<td>CHEM 4433/5533</td>
<td>Environmental Chemistry</td>
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<tr>
<td>CHEM 4437/5537</td>
<td>Environmental Chemistry Laboratory</td>
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<tr>
<td>CHEM 4438/5538</td>
<td>Experimental Biochemistry</td>
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<td>CHEM 4470/5570</td>
<td>Biorganic Chemistry</td>
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<tr>
<td>CHEM 4499/5599</td>
<td>Experimental Course</td>
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</table>

* Up to 6 credits at the 5500-level may simultaneously count toward both BS and MS degree requirements

**Degree Totals**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Program Admission Requirements</td>
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</tr>
<tr>
<td>General Education</td>
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<tr>
<td>Major Requirements (Required General Education credits removed)</td>
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<tr>
<td>Upper Division Free Electives</td>
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<td>Free Electives</td>
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<tr>
<td>Total Credits</td>
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</table>

ISU Degree Requirements (http://coursecat.isu.edu/undergraduate/degreerequirements/)

ISU General Education (http://coursecat.isu.edu/undergraduate/academicinformation/generaleducation/)

Major Academic Plan (MAP) (https://www.isu.edu/advising/maps/)