Biotechnology Certificate

Biotechnology Certificate Requirements

21-29 credits

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1610 &amp; BIOL 1615</td>
<td>Principles of Biology I (LS) and Principles of Biology I Lab (LAB)</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 2035</td>
<td>Principles of Genetics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1210 &amp; CHEM 1215</td>
<td>Principles of Chemistry I (PS) and Principles of Chemistry I Lab (LAB)</td>
<td>5</td>
</tr>
<tr>
<td>CS 1400</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>CS 1410</td>
<td>Object Oriented Programming</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1050</td>
<td>College Algebra / Pre-Calculus (MA)</td>
<td>3-5</td>
</tr>
<tr>
<td>or MATH 1060</td>
<td>Trigonometry (MA)</td>
<td></td>
</tr>
<tr>
<td>or MATH 1080</td>
<td>Pre-Calculus with Trigonometry (MA)</td>
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</tr>
<tr>
<td>or MATH 1210</td>
<td>Calculus I (MA)</td>
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</tr>
</tbody>
</table>

Total Hours 20-22

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4890R</td>
<td>Life Science Internship</td>
<td>1-8</td>
</tr>
</tbody>
</table>

Total Hours 1-8

Completion Requirements

1. Complete 21 hours of specified coursework that includes:
   a. 6 credit hours of biology and biotechnology techniques
   b. 5 credit hours of chemistry and laboratory techniques
   c. 6 credit hours of computer science programming
   d. 4 credit hours of math
2. Students are offered the opportunity to take 1 - 8 credit hours of Life Science Internship with a local Biotechnology firm, although it is not required
3. Complete all coursework with a C or higher
4. Cumulative GPA of 2.5 or higher

Biotechnology Certificate Program Learning Outcomes

At the successful conclusion of this program, students will be able to:

1. Outline the foundational concepts of biology, chemistry, computer science, and mathematics.
2. Evaluate current techniques, skills, and tools necessary for professional practice.
3. Construct effective solutions to accomplish a common goal.