### Accelerated B.S. in Biomedical Engineering

(133 credits minimum)

This program is designed to prepare the student upon graduation to pursue advanced education in a professional school (for medicine or dentistry).

The criteria for enrollment in this accelerated program include:

- Acceptance into the Albert Dorman Honors College.
- Acceptance into an accelerated pre-professional program.

#### First Year

<table>
<thead>
<tr>
<th>1st Semester</th>
<th>Term Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 101</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 111</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 111A</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 125</td>
<td>3</td>
</tr>
<tr>
<td>MATH 111</td>
<td>4</td>
</tr>
<tr>
<td>FED 101</td>
<td>2</td>
</tr>
<tr>
<td>BME 101</td>
<td>0</td>
</tr>
<tr>
<td>BME 105</td>
<td>2</td>
</tr>
<tr>
<td><strong>Term Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Term Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 102</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 121</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 121A</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 124</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 126</td>
<td>3</td>
</tr>
<tr>
<td>CS 101</td>
<td>3</td>
</tr>
<tr>
<td>MATH 112</td>
<td>4</td>
</tr>
<tr>
<td>BME 106</td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credits</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer</th>
<th>Term Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 302</td>
<td>3</td>
</tr>
<tr>
<td>MATH 279</td>
<td>2</td>
</tr>
<tr>
<td>MECH 320</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Social Sciences (upper-level) or English Composition and Cultural History (lower-level) GUR Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credits</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Term Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester</td>
<td>Term Credits</td>
</tr>
<tr>
<td>MATH 211</td>
<td>3</td>
</tr>
<tr>
<td>R120 101</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 243</td>
<td>3</td>
</tr>
<tr>
<td>BME 301</td>
<td>3</td>
</tr>
<tr>
<td>BME 420</td>
<td>3</td>
</tr>
<tr>
<td>MTSE 301</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credits</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Semester</th>
<th>Term Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 310</td>
<td>3</td>
</tr>
<tr>
<td>R120 102</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 244</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 244A</td>
<td>2</td>
</tr>
<tr>
<td>BME 422</td>
<td>3</td>
</tr>
</tbody>
</table>

\( ^1 \)
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 222 Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td><strong>Term Credits</strong></td>
<td><strong>19</strong></td>
</tr>
<tr>
<td><strong>Summer</strong></td>
<td></td>
</tr>
<tr>
<td>Social Science (lower level) GUR Elective</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 390 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BME 491 Research and Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>MATH 337 Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td><strong>Term Credits</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Third Year</strong></td>
<td></td>
</tr>
<tr>
<td><strong>1st Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Social Science (lower level) GUR Elective</td>
<td>3</td>
</tr>
<tr>
<td>CHE 230 Chemical Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>BME 430 Fundamentals of Tissue Engineering</td>
<td>3</td>
</tr>
<tr>
<td>BME 495 Capstone Design I</td>
<td>3</td>
</tr>
<tr>
<td>BME 479 BioMicroElectroMechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education GUR Elective</td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credits</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>2nd Semester</strong></td>
<td></td>
</tr>
<tr>
<td>300- or 400-level Humanities and Social Sciences (upper-level) GUR Elective</td>
<td>3</td>
</tr>
<tr>
<td>Open Elective in Humanities and Social Sciences (upper-level) GUR Elective</td>
<td>3</td>
</tr>
<tr>
<td>BME 427 Biotransport</td>
<td>3</td>
</tr>
<tr>
<td>BME 382 Engineering Models of Physiological Systems</td>
<td>3</td>
</tr>
<tr>
<td>BME 495 Capstone Design I</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Social Sciences (upper-level) Capstone GUR Elective</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education GUR Elective</td>
<td>1</td>
</tr>
<tr>
<td><strong>Term Credits</strong></td>
<td><strong>19</strong></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>133</strong></td>
</tr>
</tbody>
</table>

1 Suggested course to fulfill B.S. in BME requirements; may be replaced by BME approved course.