FOUNDATIONS OF BIOMECHANICS, MICRO-CREDENTIAL

The Foundations of Biomechanics Micro-credential consists of a three-course sequence. The field of biomechanics is a critical field within biomedical engineering and includes everything from orthopaedic applications to prosthetics and orthotics design. Any practitioner in the field would require a fundamental working skillset in mechanics and understanding of how they are applied to the human body. This program would ensure students have such a working skillset and the ability to apply that knowledge in a foundational manner.

Admission Requirements

For current, active Saint Louis University students wishing to declare a micro-credential, complete the Submit Update for Student Curriculum Record form (https://ask.slu.edu/TDClient/30/Portal/Requests/ServiceDet/?ID=160).

For non-Saint Louis University students, click here to apply as a Visiting/Non-Degree Seeking Student. (https://www.slu.edu/admission/visiting-students.php)

Learning Outcomes

Through this micro-credential students will demonstrate:

1. A fundamental understanding of different forces that apply to bodies and tissues.
2. The foundational ability to analyze forces acting on a body or tissue.
3. An understanding of how to interpret the effects of forces applied to a body or tissue.

These outcomes will be assessed directly from student artifacts throughout each of the courses in the sequence.

Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 3200</td>
<td>Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>or CVNG 2100</td>
<td>Statics</td>
<td></td>
</tr>
<tr>
<td>or MENG 2100X</td>
<td>Statics</td>
<td></td>
</tr>
<tr>
<td>BME 4200</td>
<td>Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>BME 4210</td>
<td>Human Movement Biomechanics (or other BME approved 4000 or 5000 level course focused on human biomechanics)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 9

Continuation Standards

A minimum grade of “C” is required for undergraduate courses and a minimum grade of “B” is required for post-baccalaureate/graduate courses.

Students who do not achieve the requisite grade (“C” for undergraduate coursework and “B” for graduate coursework) for continuation in the micro-credential will be allowed to repeat the course one time in an attempt to achieve the requisite grade. If they fail to achieve the necessary grade after one repeat attempt they will be dismissed from the micro-credential.

Contact Us

For more information about Biomedical Engineering Micro-credentials, please contact:

Gary Bledsoe, Ph.D.
Department Chair, Biomedical Engineering
gary.bledsoe@slu.edu