

# QUANTITATIVE PHYSIOLOGY CONCEPTS FOR ENGINEERING, MICRO- CREDENTIAL

The Quantitative Physiology Concepts for Engineering Micro-credential consists of two elective courses taken sequentially. Any development of medical devices or technologies requires a fundamental skillset in human physiology and the ability to process the quantitative aspects of that physiology. This micro-credential provides that knowledge and prepares students to go forward in their graduate, medical, or industry careers with the ability to directly understand how the human body interfaces with developing technologies.

## 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 quantitative aspects of human physiology.
2. The ability to use quantitative problem solving in human physiology scenarios.
3. A fundamental understanding of how human physiology and engineering technology come together in the development and testing of medical technologies.

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

## Requirements

Code	Title	Credits
BME 4600 or BME 5600	Quantitative Physiology I	3
BME 4650 or BME 5650	Quantitative Physiology II	3
<b>Total Credits</b>		<b>6</b>

## 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](mailto:gary.bledsoe@slu.edu)