SAINT LOUIS UNIVERSITY™

MASTER OF SCIENCE
BIOMEDICAL ENGINEERING

SAMPLE CURRICULUM PLANS

EXAMPLE PLAN #1

FIRST SEMESTER	SECOND SEMESTER
BME 5410 Tissue Engineering	BME 5650 Quantitative Physiology II
BME 5600 Quantitative Physiology I	BME 5420 Tissue Engineering Scaffold Fabrication Techniques
PATH 5350 Intro to Microscopy Techniques	BME 5320 Drug Delivery

THIRD SEMESTER	FOURTH SEMESTER
BME 54210 Human Movement Biomechanics	BME 5400 Tissue-Material Interfaces
PUBH 5040 Generating Evidence from Public Health Data	BIOL 5630 Concepts of Immunobiology

EXAMPLE PLAN #2

FIRST SEMESTER	SECOND SEMESTER
BME 5130 Medical Imaging	BME 5210 Human Movement Biomechanics
PUBH 5040 Generating Evidence from Public Health Data	ECE 5930 Microcontrollers
MENG 5100 Advanced Mechanics of Solids	PHYS 5030 Mathematical Methods in Physics

THIRD SEMESTER	FOURTH SEMESTER
BME 5600 Quantitative Physiology I	BME 5650 Quantitative Physiology II
MENG 5902 Numerical Methods Using Matlab and LabVIEW	BME 5150 Brain Computer Interface

EXAMPLE PLAN #3

FIRST SEMESTER	SECOND SEMESTER
BME 5410 Tissue Engineering	BME 5400 Tissue Material Interfaces
BME 5600 Quantitative Physiology I	BME 5430 Regenerative Medicine
BME 5930 Biomedical Robotics	BME 5650 Quantitative Physiology II

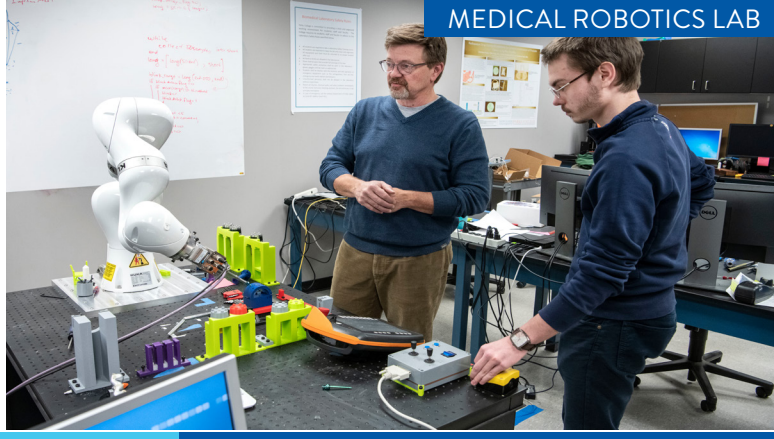
THIRD SEMESTER	FOURTH SEMESTER
BME 5930 Biofluids	BME 5150 Brain Computer Interface
BME 5130 Medical Imaging	ECE 5153 Image Processing

SAINT LOUIS UNIVERSITY™

EST. 1818

REQUIREMENTS FOR THE M.S. IN ENGINEERING

+ B.S. in Engineering (or a science-related field)
+ English proficiency (e.g, TOEFL - 80, IELTS - 6.5)
+ Letters of Recommendations
+ Resumé
+ Professional Goal Statement


MEDICAL ROBOTICS LAB

RESEARCH **OPPORTUNITIES**

SOFT TISSUE ENGINEERING LAB

The goal of this lab is to engineer and characterize synthetic biomaterials in order to provide a complete toolbox for building 3D in vitro models as platforms for toxicology screening and for the study of disease progression. The current focus is on models of solid tumors as well as models to study neurotoxicity, a side effect associated with chemotherapy. In addition, the lab actively seeks to apply its work towards other disease systems and congruous research areas such as biosensors and drug delivery.

NEURO-ENGINEERING LAB

The Neuroengineering Lab's research combines behavioral, electrophysiological and computational approaches to study functions and mechanisms of the mammalian auditory pathways in speech perception and sound localization. The lab's first project involves simulating cochlear-implant hearing with a noise-vocoding technique.

ACCESS TO **INDUSTRY**

+ St. Louis is home to nine Fortune 500 companies
+ Students gain valuable experience working with faculty and industry professionals through internship and Optional Practical Training (OPT).
+ Here are a few of the corporations and government agencies where SLU M.S. in Engineering graduates can be found:

- AT&T
- Boeing
- The construction industry (i.e. Alberici)
- Departments of Transportation
- Lockheed Martin
- Medtronic
- Northrop Grumman
- Samsung
- SpaceX

FINANCING A **SLU ENGINEERING GRADUATE DEGREE?**

+ $42,000 (flat rate tuition)
+ $10,000 average scholarship

The city of St. Louis is ranked one of the most affordable cities in the U.S. In fact, St. Louis is:

+ 15%-75% more affordable than Chicago
+ 20%-120% more affordable than Los Angeles
+ 50%-200% more affordable than New York City

TAKE THE NEXT *step*

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