



New Program Report

Date Submitted:

11/18/2021

Institution

University of Missouri-Kansas City

Site Information

Implementation Date: 8/1/2023

Added Site(s):

Selected Site(s):

University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO, 64110

CIP Information

CIP Code:

140501

CIP Description:

A program that prepares individuals to apply mathematical and scientific principles to the design, development and operational evaluation of biomedical and health systems and products such as integrated biomedical systems, instrumentation, medical information systems, artificial organs and prostheses, and health management and care delivery systems.

CIP Program Title:

Bioengineering and Biomedical Engineering

Institution Program Title:

Biomedical Engineering

Degree Level/Type

Degree Level:

Master Degree

Degree Type:

Master of Science

Options Added:

Collaborative Program:

N

Mode of Delivery

Current Mode of Delivery

Classroom

Student Preparation



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Special Admissions Procedure or Student Qualifications required:

The MSBME is open to applicants with a bachelor or equivalent degree in STEM fields including engineering, computer science, life science, medical science, and physical science disciplines. Applicants who have a bachelor degree in non-STEM field but have more than three years of working experience in biomedical and healthcare sectors are also eligible to apply.

The GRE is not required for the applicants. New international applicants are required to satisfy TOEFL or other similar English language proficiency requirements. The MSBME will be primarily administered by SCE. However, as an interdisciplinary graduate degree program it will include courses and research projects offered by SCE, the Schools of Biological Science, Dentistry, Medicine, Nursing, Pharmacy, and any other units that have biomedical-related curricular and research activities.

Admission into the MSBME degree program will be open to both full-time and part-time graduate students.

Specific Population Characteristics to be served:

n/a

Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate:

As needed, and as enrollments grow, adjunct instructors will be used for some elective courses, but required courses will be taught by full-time faculty members.

Estimate Percentage of Credit Hours that will be assigned to full time faculty:

It is estimated that near 100% of the credit hours in the program will be assigned to full-time faculty members.

Expectations for professional activities, special student contact, teaching/learning innovation:

In addition to Associate Dean Masud Chowdhury and Assistant Dean Katherine Bloemker, a degree program committee (DPC) will be formed to help keep tracks of activities, students, and advising for the proposed MSBME Degree.

Student Enrollment Projections Year One-Five

Year 1	Full Time: 8	Part Time: 0	
Year 2	Full Time: 16	Part Time: 0	
Year 3	Full Time: 19	Part Time: 0	Number of Graduates: 8
Year 4	Full Time: 29	Part Time: 0	
Year 5	Full Time: 47	Part Time: 0	Number of Graduates: 17

Percentage Statement:

n/a

Program Accreditation

Institutional Plans for Accreditation:

No special accreditation is needed other than the standard requirements for the traditional graduate programs.

Program Structure



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Total Credits:

30

Residency Requirements:

None

General Education Total Credits:

0

Major Requirements Total Credits:

30

Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
ME 406/5506	3	Introduction to Biomaterials
CS 465R/5565	3	Introduction to Statistical Learning
ECE 380	3	Signals and Systems
Biology 4XX/5XXX	3	Biostatistics II
MEDB 5501	3	Biostatistics I

Free Elective Credits:

0

Internship or other Capstone Experience:

None

Assurances

I certify that the program is clearly within the institution's CBHE-approved mission. The proposed new program must be consistent with the institutional mission, as well as the principal planning priorities of the public institution, as set forth in the public institution's approved plan or plan update.

I certify that the program will be offered within the proposing institution's main campus or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program of another Missouri institution in accordance with 6 CSR 10-4.010, subsection (9)(C) Submission of Academic Information, Data and New Programs.

I certify that the program will build upon existing programs and faculty expertise.

I certify that the program can be launched with minimal expense and falls within the institution's current operating budget.

I certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful. Institutions' decision to implement a program shall be based upon demand and/or need for the program in terms of meeting present and future needs of the locale, state, and nation based upon societal needs, and/or student needs.

Contact Information

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