

NEW UNDERGRADUATE MINOR / CHANGE UNDERGRADUATE MINOR FORM

Current Total Hours: _____

Proposed Total Hours: _____

Rationale for Proposal: _____

Will this program be printed in the Bulletin?

Yes

No

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Signature Routing Log

General Information:


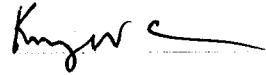
Proposal Name: Minor in Biomedical Engineering

Proposal Contact Person Name: David Puleo Phone: 7-2405 Email: puleo@uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
BME Faculty	2/12/14	David Puleo / 7-2405 / puleo@uky.edu	
COE Faculty	5-2-14	Kim Anderson / 7-1864 / ^{Kimberly.} anderson@ _{uky.edu}	
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External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision ¹
Undergraduate Council	3/3/15	Joanie Ett-Mims	
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

¹ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

Minor in Biomedical Engineering

This minor is intended for undergraduate engineering students seeking to supplement their education by applying skills learned in their respective disciplines to the field of biomedical engineering (BME). The emphasis on upper level BME courses builds upon the foundation taught in core undergraduate engineering courses. Beyond the one required course, students will chose at least five elective courses in consultation with a Biomedical Engineering faculty advisor. Students and their advisor may select courses providing concentration in a particular subfield, or they may select courses providing breadth across the field of biomedical engineering. Examples of both types of curricula will be made available.

The minor in biomedical engineering requires: a) a minimum of 18 hours of coursework; b) a GPA of 2.5 in these courses; and c) no grade lower than a C in any BME course. At the discretion of the BME department chair (or designee), a limited number of equivalent course substitutions (i.e., 6 credit hours) may count toward the requirements for this minor. At least 12 credits must have the BME prefix.

Required course

BME 301 Fundamentals of Biomedical Engineering (3 credits)

Elective courses (select five from among the following[#])

BME 395 Independent Research in Biomedical Engineering (1-6 credits)

BME 405 Introduction to Biomedical Signal Processing (3 credits)

BME 472 Human Biomechanics (3 credits)

BME 485 Fundamentals of Biofluid Mechanics (3 credits)

BME 488 Introduction to Biomaterials (3 credits)

BME 508 Cell Mechanics and Mechanobiology (3 credits)

BME 515 Modeling of Physiological Systems (3 credits)

BME 530 Biomedical Instrumentation (3 credits)

BME 540 Mechanical Modeling of Human Motion (3 credits)

BME 579 Neural Engineering (3 credits)

BME 580 Introduction to Biomedical Imaging (3 credits)

BME 481G Topics in Biomedical Engineering (Subtitle required) (3 credits)

BME 599 Topics in Biomedical Engineering (Subtitle required) (3 credits)

[#] up to 6 credit hours of independent research (e.g., BME 395) or special topics courses (e.g., BME 481G or BME 599) may count as electives.