

INSTRUCTIONS TO STUDENT AND RESEARCH FACULTY ADVISOR

This report serves two purposes. First, since 6 research credits are required for the BME minor program, the University guidelines require the department to keep a record of each student's work in every course of the undergraduate minor program. Second, it affords a means whereby each student will receive appropriate approval for and assistance in planning BME research studies.

POLICIES AND CRITERIA FOR APPROVAL OF RESEARCH FOR BME MINOR

BME research is a required component for undergraduates BME minor program. Students are required to take 6 credits of research and they may pursue one or a combination of the following options in order to fulfill the requirement:

1. Senior design courses (BSE 4125/6, ESM 4015/6, ISE 4005/6, ME 4015/6, MME 4535/6)
2. Departmental undergraduate research course (4994)
3. BMES 4994

The project must be related to BME and approval must be required using the *Petition and Authorization for BME Project Approval*. The research project must be a significant body of knowledge and/or work relevant to biomedical engineering. The study cannot duplicate work in any course previously taken while the student is earning a degree.

PROCEDURE

1. A BME-relevant research study must have advance approval of the student's research advisor and the BMES Undergraduate Program Director. Directed research must be under the advisor's supervision unless arrangements are made in advance for some other faculty member to direct the study.
2. The student must confer with his or her research advisor before requesting approval. The proposed research study must be carefully planned, the availability of necessary materials should be verified, and the procedure for certifying credits (i.e., special examination report) should be agreed upon. ***Petition and Authorization for BME Project Approval forms that do not provide detailed course descriptions will NOT be approved.***
3. BMES Undergraduate Committee will review all requests and students will receive a decision within 2 weeks of submitting.

Guidelines for Research Project Approval for BME Minor

1. Prior to registering for research credits, a research faculty advisor must be identified by the student.
2. The student and research advisor must complete and file a *Petition and Authorization for BME Project Approval* form:
 - a. Please print the research advisor's name after the signature and identify his/her home department.
 - b. The form must describe the outline of the course, significance of the course to BME, and manner in which the course is to be evaluated. Detailed information should be provided.
 - c. The number of credits should total 6 for the BME minor requirement.
3. The *Petition and Authorization for BME Project Approval* form must be approved by the research advisor and the BMES Undergraduate Program Director (Dr. Sara Arena, sarena@vt.edu) in order to have the credits be used to meet BME minor requirements.
4. The research advisors are responsible for submitting the final grade for the research credits at the end of the term. If for any reason, the student is to be given a deferred grade at the end of the term, the research advisor should email this information to the BMES Undergraduate Program Director.

BME MINOR
PETITION AND AUTHORIZATION FOR
BME RESEARCH PROJECT APPROVAL*

This form must be approved by the student's faculty research advisor and submitted to the BMES Undergraduate Program Director, Dr. Pam VandeVord, pvord@vt.edu, for approval.

Student Name _____ ID# _____

Student Email _____ Major _____

Student will fulfill BME research requirement by registering in _____ for a total of 6 credit hours. CRN: _____ Semester(s) _____

DESCRIPTION OF RESEARCH. Discuss with research advisor before preparing the petition.

1. Research outline. (Include key reading assignment if applicable. Attach additional page if necessary).

2. Significance of research to BME.

3. Manner in which the research will be evaluated (e.g. oral or written reports, essays, etc.)

APPROVALS

(Print Research Advisor Name)	(Research Advisor Signature)	Date
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(BMES Undergraduate Program Director)	Date
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*Completion of this form is for BME minor purposes only. In order to register for Undergraduate Research in the College of Engineering, students must also complete the "Independent Study/Undergraduate Research" form available here: [Research/Independent Study | Engineering | Virginia Tech \(vt.edu\)](#).