BIOMEDICAL ENGINEERING AMP

All students must meet the Requirements for the Accelerated Master's Degree Pathway.

OVERVIEW

Qualified undergraduate students who plan to earn a M.S. in biomedical engineering may enroll in the Accelerated Master's Entry Pathway, which enables students to begin working on the M.S. while still an undergraduate. Students typically apply to the program in the second semester of their junior year. Following acceptance by the Graduate College, students may take up to 6 graduate credits (defined as 5000-level or above) while still an undergraduate that can be counted toward both the B.S. and the M.S. degrees. Another 3 graduate credits can be counted towards the M.S. degree while an undergraduate but cannot count towards the B.S. degree. The graduate credits taken prior to completion of the bachelor's must be in graded coursework only; independent study, research credits, internships and practica will not count towards the M.S. In addition, the courses taken must be approved by the student's graduate advisor.

SPECIFIC REQUIREMENTS

Requirements for Admission to Graduate Studies for the Degree of Master of Science for Accelerated Students

To apply for the program, students must be enrolled in an engineering program at the University of Vermont with a cumulative grade point average of at least 3.20 at the time of application, and must complete the CEMS Accelerated Masters Permission Form and the Graduate College application. For thesis students, the application should name a graduate faculty member who has agreed to serve as their thesis advisor. No Graduate Record Examination (GRE) is required for AMP applicants.

Minimum Degree Requirements for the Degree of Master of Science

Requirement Description	Credits
Thesis-Based	
24 credit hours of coursework, at least 6 of which must be at the 6000-level. At least 15 credit hours will come from CEE, EE, BME, ME, CS, EMGT, CMPE, CEMS and/or ENGR graduate courses. At least 6 credits will have BME designation.	24
6 credit hours of research conducted with BME associated faculty.	6
Degree Capstone: A thesis must be completed, under the supervision of a BME graduate program faculty member. The written thesis must meet Graduate College requirements and be defended orally in a public forum.	
Project-Based	

27 credit hours, at least 6 of which must be at the 6000-level. At least 15 credit hours will come from CEE, EE, BME, ME, CS, EMGT, CMPE, CEMS and/or ENGR graduate courses. At least 6 credits will have BME designation.	27
3 credit hours of project conducted with BME associated faculty.	3
Degree Capstone: A poster must be presented at Spring BME Student Symposium (or other public forum) on the project. Poster presentation must meet requirements as assessed by BME faculty.	
Coursework Option	
30 credit hours, at least 6 of which must be at the 6000-level. At least 15 credit hours will come from CEE, EE, BME, ME, CS, EMGT, CMPE, CEMS and/or ENGR graduate courses. At least 6 credits will have BME designation.	30

Comprehensive Examination

M.S. Thesis Option: The student must orally present a proposal for their thesis research at least 3 months prior to their final semester's last day of classes. The student's thesis committee will orally examine the student based on the student's coursework and research focus.

M.S. Project Option: The student must present a written proposal for their project submitted in BME 6995. The proposal requires approval by 2 supervising faculty with at least 1 faculty from BME.

M.S. Coursework Option: The student must give a presentation on how their course work has prepared them for their career goals. The presentation will be given during their final semester (typically at the Spring BME Student Symposium) and will be assessed by at least 2 BME faculty members.

Requirements for Advancement to Candidacy for the Degree of Master of Science

 $Successful\ completion\ of\ the\ Comprehensive\ Examination.$

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