

BIOMEDICAL ENGINEERING: RESEARCH, MS

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (<https://guide.wisc.edu/graduate/#requirements>) and policies (<https://guide.wisc.edu/graduate/#policies>), in addition to the program requirements listed below.

NAMED OPTION REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW–Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement Detail

Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	16 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).

Overall	3.00 GPA required.
Graduate GPA Requirement	Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).

Other Grade Requirements n/a

Assessments and Examinations There are no degree-specific assessments and examinations outside of those given in individual courses.

Language Requirements n/a

REQUIRED COURSES

Specific course selection is very flexible and draws upon a variety of courses. The required coursework is designed to complement each student's interests and background in biomedical engineering. At least 15 credits, numbered 400 or above, must be completed in one area of specialization. This is earned through a combination of engineering, bioscience and elective coursework. Areas of specialization are defined by the student and faculty advisor in relation to each student's research. Please keep written communication (emails are acceptable) of approvals from your faculty advisor.

Code	Title	Credits
Research		
Relevant courses include:		6
B M E 790	Master's Research and Thesis	
B M E 890	Pre-dissertation Research	
Seminar		
Students must complete 2 semesters of the following:		2
B M E 701	Seminar in Biomedical Engineering	
Engineering		
College of Engineering courses, numbered 400 or above (B M E, CBE, CIV ENGR, E C E, E M A, E P, E P D, G L E, I S Y E, INTEREGR, M E, M S & E, N E)		12
Bioscience		
Complete one of the following:		3
ANAT&PHY 335	Physiology	
ANAT&PHY 435	Fundamentals of Human Physiology	
BIOCHEM 501	Introduction to Biochemistry	
CRB 640	Fundamentals of Stem Cell and Regenerative Biology	
CRB 650	Molecular and Cellular Organogenesis	
CRB/B M E 670	Biology of Heart Disease and Regeneration	
NEUROL 735	Neurobiology of Disease	
NTP/NEURODPT 610	Cellular and Molecular Neuroscience	
ZOOLOGY/PSYCH 523	Neurobiology	
BIOCHEM/GENETICS/MICROBIO 612	Prokaryotic Molecular Biology	
BIOCHEM/GENETICS/MD GENET 620	Eukaryotic Molecular Biology	

ONCOLOGY 401 Introduction to Experimental
Oncology

M M & I/PATH-
BIO 528 Immunology

PATH 750 Cellular and Molecular Biology/
Pathology

ZOOLOGY 570 Cell Biology

Electives

Choose in consultation with your advisor 7

Total Credits 30