

MS- Bioengineering

Total number of credits must be 30 credits or greater.

General Requirements

- 30 credits total (including thesis credits)
- 10 credits (minimum) of EBIO 590 Master's Thesis
- 21 or more credits required for degree must be at 5xx level
- 3xx level courses are not allowed
- 4xx level courses may be used (maximum of 9)
- Courses with grades below C- cannot be used to satisfy degree requirements
- Three credits (min.) registration required during term of:
 - Comprehensive Examination and Thesis defense
 - Graduation (1 credit with in absentee graduation request on file)

A Bioengineering MS program of study should include the following:

EGEN 505	Advanced Engineering Analysis	3
or EGEN 506	Numerical Sol to Engr Problems	
EBIO 594	Seminar (Can be taken twice)	1
EBIO 590	Master's Thesis	10
Engineering Courses ¹		6
EBIO 461	Principles of Biomedical Engineering	3
EBIO 566	Fundamentals of Biofilm Engr	3
EELE 509	The Art of Biochips - Solving Healthcare Problems with BioMEMS	3
EENV 561	Environ Eng Reactor Theory	3
EENV 562	Water Treatment Process/Design	3
EENV 563	Wastewater Treat Proc/Design	3
EIND 413	Ergonomics & Human Factors Engineering	3
EIND 511	Design for Quality of Life	3
EIND 514	Occupational Biomechanics	3
EMAT 464	Biomedical Materials Engineering	3
EM 525	Continuum Mechanics	3
EMEC 465	Bio-inspired Engineering	3
EMEC 524	Cellular Mechanotransduction	3
EMEC 540	Biomechanics of Human Movement	3
Other Graded Courses ¹		9-10
BCH 524	Mass Spectrometry	3
BCH 544	Molecular Biology	3
BIOH 528	Molecular Basis of Neurological Diseases	3
BIOH 520	Molecular Genetics	3
BIOH 528	Molecular Basis of Neurological Diseases	3
BIOH 542	Survey of Current Cell Signaling	2
BIOH 565	Gene Expression Lab: From Genes to Proteins to Cells	3
BIOM 430	Applied and Environmental Microbiology	4
MB 520	Microbial Physiology	3
MB 540	Environmental Microbiology	3

¹ Curriculum requirements for the M. S. degree in Bioengineering are highly individualized and established in consultation with and approved by the student's graduate committee. The courses listed are often considered when establishing the program of study for a particular student. Exceptions from the Engineering course requirements (6 credits) will be considered by the Bioengineering MS oversight committee.