

Bioengineering

Master of Engineering: 30 Credits / 10 Courses

Students in the Professional Master of Engineering in bioengineering program will take four core courses and six elective courses that are pre-approved. Students must obtain permission from their academic advisor for any non-BIOE elective course. There is no research or thesis required for this degree.

Bioengineering Core (take four courses):	
BIOE658M	Applied Mathematics in Bioengineering (every Fall)
BIOE658R	Regulatory Affairs in Medical Product Development (every Fall)
BIOE658E	Biomedical Device Developments (every Spring, starting Spring 2021)
BIOE658P	Physiology for Bioengineers (every Spring)

Bioengineering Pre-approved Electives (choose at least three courses):	
BIOE658D	Application of Biomaterials (every odd Fall)
BIOE658G	Genome Editing and Synthetic Biology (every even Fall)
BIOE658A	Additive Manufacturing for Bioengineering Applications (Spring 2020 then every odd Spring)
BIOE658Y	Applications of Tissue Engineering (every even Spring)
BIOE658W	Biosensor Techniques, Instrumentation, and Applications (every Summer)
BIOE658L	Applications in Biopharmaceutical Engineering (every even Summer)
BIOE658F	Applications of Bioinformatics (every odd Summer)
BIOE6XX	<i>(note: priority enrollment for non-M.Eng. specific 600-level BIOE courses will be given to Ph.D. and M.S. students. M.Eng. students may enroll if seats are available at the start of the term)</i>
ENPM808	Independent Study – OR – BIOE658N Advanced Experiences in Bioengineering (Co-op) (maximum of one – application form must be submitted one month before start of term for approval)
BIOE4XX	(maximum of one, with advisor approval)

Optional Non-BIOE Technical Electives (maximum of three courses) with advisor approval	
Professional Development (maximum one course)	
	ENCE627 - Project Risk Management
	ENCE662 - Introduction to Project Management
	ENCE604 - Sustainability Fundamentals for Project Managers
	ENCE665 - Management of Project Teams
Biological Science (maximum 4 credits) <i>(note: CBMG classes are frequently only 2-credits, will need to take two to satisfy credit requirement)</i>	
	600-level courses in BIOL, BCHM, CBMG
Math (maximum one course)	
	600-level courses in MATH, CMSC, STAT, EPIB
6XX Engineering (non-professional development courses) (maximum of three courses)	

Students that began the PMBI/MEBI programs before January 2020 can choose to use the curriculum applicable to their catalog entry year, if available.

NOTE: Any courses not listed above must be approved by the Senior Academic Advisor **PRIOR** to registration.

KEY	
Online Option *	(offering information)
[Prerequisite course]	