

Master of Science in Biopharmaceutical Process Engineering (MSBPE)

2026-27 Academic Catalog/Class of 2027 Graduation Requirements

Qualified candidates with undergraduate degree in Biomanufacturing/Biochemical Engineering or equivalent, who satisfy the admissions requirements, will be considered for this one-year program. Students in the MSBPE program are required to complete a minimum of 30 Credits over the course of the study.

Description	Credits
Biopharmaceutical Processing	12
Capstone Design Project (TMP)	12
Other courses (Business, Science)	6
Total	30

Program Requirements

1st Year FALL Core Courses			
Course title	Number	Module	Credit
Engineering Fundamentals for Bioprocessing	ENG 5153	FF	3
Data Analytics in Python	MATH 5100	F1	1.5
Team Master's Project	PDEV 5000	FF	6
Introduction to Bioscience Industries	BUS 5000	FF	3
Introduction to Upstream Processing LAB	ENG 5133	S1	1.5
Subtotal			15

1st Year SPRING Core Courses			
Course title	New number		Credit
Advanced Upstream Processing LAB	ENG 5134	S2	1.5
Downstream Processing LAB	ENG 5145	S1	1.5
Statistical Methods and Experimental Design in Bioprocessing	ENG 5110	S1	1.5
Advanced Bioseparations Engineering	ENG 6140	S2	1.5
Advanced Upstream Processing	ENG 6132	S2	1.5
Team Master's Project	PDEV 5000	SS	6
Electives	TBD	SS	1.5
Subtotal			15