

PROGRAM PLANNING GUIDE
BIOTECHNOLOGY: Bioprocess Manufacturing Technology
A20100M

Replaces Curriculum Schedule with Revision Date: 2024FA

Effective Term: 2026FA

CURRICULUM BY SEMESTER

Course No.			Course Title			Hours Per Week		
						Class	Lab	Credits
Semester 1								
BPM	110	Bioprocess Practices				3	4	5
ISC	278	cGMP Quality Systems				2	0	2
CIS	110	Introduction to Computers				2	2	3
ISC	121	Environmental Health & Safety				3	0	3
ENG	111	Writing & Inquiry				3	0	3

Semester 2								
BIO	110	Principles of Biology				3	3	4
CHM	131	Introduction to Chemistry				3	0	3
CHM	131A	Introduction to Chemistry Lab				0	3	1
BPM	111	Bioprocess Measurements				3	3	4
MAT	121	Algebra/Trigonometry I				2	2	3

Semester 3								
		Major Elective				0	0	2

Semester 4								
BPM	112	Upstream Processing				3	4	5
ENG	112	Writing/Research				3	0	3
PTC	226	Validation				3	0	3
BTC	275	Industrial Microbiology				3	3	4

Semester 5								
BPM	113	Downstream Processing				3	3	4
HUM	110	Technology & Society				3	0	3
OMT	181	Industry Reporting Skills				3	0	3
PCI	173	Programmable Systems				3	3	4
PSY	150	General Psychology				3	0	3

Graduation Requirement Credit Hours: 65
MAJOR ELECTIVES

Course No.			Course Title			Hours Per Week		
						Class	Lab	Credits
Major Electives						Credit Hours Needed: 2		
WBL	112	Work-Based Learning I				0	20	2
BTC	150	Bioethics				3	0	3
ATR	115*	Intro to Mechatronics				3	3	4
HYD	180*	Hydraulics and Pneumatics				2	3	3