

BIOPROCESS TECHNOLOGY

(A50440)

Associate in Applied Science Degree

The Bioprocess Technology curriculum is designed to prepare individuals to work as Process Operators in biological products manufacturing facilities. Students will combine basic science and communication skills, manufacturing technologies, and good manufacturing practices in the course of the study.

Students will be expected to develop a strong basic science foundation with a sound understanding of the major technologies employed by the industry. They will also be expected to develop collaborative and disciplined work ethics while consistently practicing problem-solving skills.

Upon successful completion of the program, individuals should possess the necessary skills to qualify for employment in a variety of Bioprocessing industries.

COURSE AND HOUR REQUIREMENTS

Title	Class	Lab	Work Exp/		
			Clinical	Credits	
I. GENERAL EDUCATION COURSES					
Communications:					
ENG 111	Expository Writing	3	0	0	3
ENG 114	Professional Research & Reporting	3	0	0	3
Humanities/Fine Arts: (Select one)*					
ART 111	Art Appreciation	3	0	0	3
DRA 111	Theatre Appreciation	3	0	0	3
HUM 121	The Nature of America	3	0	0	3
HUM 122	Southern Culture	3	0	0	3
PHI 210	History of Philosophy	3	0	0	3
Mathematics: (Select one)*					
MAT 121	Algebra/Trigonometry	2	2	0	3
MAT 161	College Algebra	3	0	0	3
Social/Behavioral Science: (Select one)*					
HIS 131	American History I	3	0	0	3
POL 120	American Government	3	0	0	3
PSY 118	Interpersonal Psychology	3	0	0	3
PSY 150	General Psychology	3	0	0	3
SOC 210	Introduction to Sociology	3	0	0	3

*Additional pick list on pages 101-108

continued. . .

A. CORE

COURSE AND HOUR REQUIREMENTS

Title	Class	Lab	Work Exp/		
			Clinical	Credits	
Required Courses:					
BPM 110	Bioprocess Practices	3	4	0	5
BPM 111	Bioprocess Measurements	3	3	0	4
BPM 112	Upstream Bioprocessing	3	4	0	5
BPM 113	Downstream Bioprocessing	3	3	0	4
PTC 110	Industrial Environment	3	0	0	3

B. CONCENTRATION (Not applicable)

C. OTHER MAJOR HOURS

BIO 110	Principles of Biology	3	3	0	4
BIO 275	Microbiology	3	3	0	4
BUS 270	Professional Development	3	0	0	3
CHM 131	Introduction to Chemistry	3	0	0	3
CHM 131A	Introduction to Chemistry Lab	0	3	0	1
CHM 132	Organic & Biochemistry	3	3	0	4
CIS 110	Introduction to Computers	2	2	0	3
ISC 110	Workplace Safety	1	0	0	1
ISC 121	Environmental Health & Safety	3	0	0	3
ISC 221	Statistical Quality Control	3	0	0	3

OTHER REQUIRED HOURS: (Select 4 hours)

BUS 260	Business Communications	3	0	0	3
COE 111,112,113	Cooperative Work Experience I	0	0	10-20-30	1-2-3
COE 121,122,123	Cooperative Work Experience II	0	0	10-20-30	1-2-3
COE 131	Cooperative Work Experience III	0	0	10	1
SPA 111	Elementary Spanish I	3	0	0	3

TOTAL SEMESTER HOURS FOR A.A.S. DEGREE: 69