

Biotechnology

Curriculum Description

The Biotechnology curriculum, which has emerged from molecular biology and chemical engineering, is designed to meet the increasing demands for skilled laboratory technicians in various fields of biological and chemical technology.

Course work emphasizes biology, chemistry, mathematics, and technical communications. The curriculum objectives are designed to prepare graduates to serve in three distinct capacities: research assistant to a biologist or chemist; laboratory technician/instrumentation technician; and quality control/quality assurance technician.

Graduates may find employment in various areas of industry and government, including research and development, manufacturing, sales, and customer service.

The following represents one way in which the program of study can be completed. Students who aren't able to follow this plan should consult their academic advisor to be sure that they take courses in the best order for their success.

Associate in Applied Science

A20100

Day and Evening

POS Approved: Fall 2008

Course Prefix	Course Number	Course Title	HOURS PER WEEK			
			Class	Lab	Clinical/Credit	Shop Co-op Hours

Fall Semester

BIO 111 General Biology I 3 3 0 4

Select one:

CHM 131 Introduction to Chemistry 3 0 0 3

AND

CHM 131A Introduction to Chemistry Lab 0 3 0 1

OR

CHM 151 General Chemistry I (3) (3) (0) (4)

Select one:

CIS 110 Introduction to Computers 2 2 0 3

OR

CIS 111 Basic PC Literacy (1) (2) (0) (2)

ENG 111 Expository Writing 3 0 0 3

Select one:

MAT 110 Mathematical Measurement 2 2 0 3

OR

MAT 115 Mathematical Models (2) (2) (0) (3)

OR

MAT 161 College Algebra* (3) (0) (0) (3)

OR

MAT 175 Precalculus* (4) (0) (0) (4)
13 10 0 17

Spring Semester

BIO 112 General Biology II 3 3 0 4

CHM 132 Organic Chemistry 3 3 0 4

MAT 155 Statistical Analysis 3 0 0 3

MAT 155A Statistics Analysis Lab 0 2 0 1

Select one:

PSY 118 Interpersonal Psychology 3 0 0 3

OR

PSY 150 General Psychology* (3) (0) (0) (3)
12 11 0 16

Summer Term

BTC 181 Basic Lab Techniques 3 3 0 4

WEB 110 Inter/Web Fundamentals 2 2 0 3

____ Humanities/Fine Arts Elective 3 0 0 3

____ Technical Specialty Elective ** ** ** **

____ Technical Specialty Elective ** ** ** **
** ** ** **

Fall Semester

BIO 285 Research & Measurements 2 4 0 4

Select one:

BTC 288 Biotech Lab Experience 0 6 0 2

OR					
COE 111	Co-op Work Experience I	(0)	(0)	(10)	(1)
OR					
COE 112	Co-op Work Experience II	(0)	(0)	(20)	(2)
<i>Select one:</i>					
COM 231	Public Speaking*	3	0	0	3
OR					
ENG 112	Argument-Based Research	(3)	(0)	(0)	(3)
OR					
ENG 114	Prof Research & Reporting*	(3)	(0)	(0)	(3)
___	___ Technical Specialty Elective	**	**	**	**
___	___ Technical Specialty Elective	**	**	**	**
		**	**	**	**

Total Credit Hours: 64 - 76

Additional Information

Technical Specialty Electives - Select a minimum of 15 credit hours: BIO 250, BIO 275, BTC 150, BTC 250, BTC 270, BTC 281, BTC 282, BTC 283, BTC 285, BTC 286, or CHM 263

Humanities/Fine Arts Elective - Select one: HUM 110, HUM 220, PHI 215, or PHI 240. Consult an academic advisor concerning other possible electives.

*This course is recommended for students transferring to a four-year university.

**Hours vary depending on course selection.