

Biotechnology and Molecular Biosciences
Associate in Applied Science (AAS)
60-65 Credits
Major Code: 3034

Program Description: This program will specifically train technicians to work in research and development, biomanufacturing, and the drug discovery and testing field of Biotechnology. Exposure to an academic environment that simulates the contemporary biotechnological workplace, inclusive of analytical, critical thinking and problem-solving skills, will form a strong technical foundation sought by employers. Successful completion of the program will also provide the educational background for those wishing to pursue a career in the pharmaceutical industry, clinical laboratory medicine, forensics or environmental testing laboratories.

Program Notes:

+ indicates course has prerequisites and/or corequisites.

Students must earn a grade of "C" or better for each course listed in the Required Courses category.

Required Courses: Credits: 42

Note: BIO215 should be taken once per semester for a total of six (6) credits.

BIO181	General Biology (Majors) I	4
+ BIO205	Microbiology (4) OR	
+ BIO220	Biology of Microorganisms (4)	4
BIO211AA	Biotechnology Seminar: Biomedical Applications	1
+ BIO211AB	Biotechnology Seminar: Laboratory Protocol	1
+ BIO211AC	Biotechnology Seminar: Current Topics in Agriculture	1
+ BIO211AE	Biotechnology Seminar: Business and Regulatory Issues	1
+ BIO212AA	Biotechnology I	5
+ BIO212BA	Cell Biotechnology	5
+ BIO215	Biotechnology Internship (3)	6
+ CHM130	Fundamental Chemistry (3) AND	
+ CHM130LL	Fundamental Chemistry Laboratory (1) OR	
+ CHM151	General Chemistry I (3) AND	
+ CHM151LL	General Chemistry I Laboratory (1)	4
+ CHM230	Fundamental Organic Chemistry (3) AND	
+ CHM230LL	Fundamental Organic Chemistry Laboratory (1)	4
+ CHM260	Biochemistry	3
CSC180	Computing for Scientists, Engineers and Medical/Health Specialists (3) OR	
+ CSC283	Bioinformatics and Scientific Computing (3)	3

General Education: Credits: 18-23

CORE: Credits: 12-17

First-Year Composition

+ ENG101	First-Year Composition (3) AND	
+ ENG111	Technical Writing (3) OR	
+ ENG102	First-Year Composition (3)	6

Oral Communication

COM100	Introduction to Human Communication (3) OR	
+ COM225	Public Speaking (3) OR	
+ COM230	Small Group Communication (3)	3

Critical Reading

+ CRE101	Critical and Evaluative Reading I (3) OR Exemption by testing	0-3
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Mathematics

+ MAT120	Intermediate Algebra (5) OR	
+ MAT122	Intermediate Algebra (3) OR Equivalent or higher level Mathematics course	3-5

DISTRIBUTION: Credits: 6

Humanities and Fine Arts

PHI213	Medical and Bio-Ethics	3
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Social and Behavioral Sciences

Any approved general studies course from the Social & Behavioral Sciences area	3
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Natural Sciences

Met by BIO181, CHM130 OR CHM151, and CHM230 in Required Courses area.	0
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