

Biotechnology, A.S.

The greater Kansas City area and specifically Johnson County have numerous biological-, pharmaceutical- and chemical-related formulating, manufacturing, research and testing companies. Many of these facilities employ scientific technicians to support the endeavors of their professional scientists and engineers.

JCCC's science technology program is designed to develop scientific support personnel for the metropolitan area.

This program offers specific knowledge and training designed to provide you with entry-level skills for employment as a technician. It also provides the breadth of background sufficient to encourage change and flexibility.

The biotechnology associate of science degree program will prepare students who wish to pursue a baccalaureate degree in the biological sciences. Upon completion of this 76-hour degree, students will be able to find entry-level or higher positions in the diverse field of biotechnology. Along with basic and more advanced science courses, students will take specialized courses in subjects such as laboratory safety and biotechnology methods.

Note: Metropolitan Community College students should seek specific counsel from the JCCC program personnel for the appropriate course plan and numbers.

Metropolitan Community College students should refer to Cooperative Program Information (<http://www.jccc.edu/cooperative>).

IMPORTANT - Students planning to graduate with a Biotechnology degree must complete one of the approved cultural diversity courses. Some of the approved courses are able to meet both the cultural diversity requirement and a general education requirement. To see a complete list of approved courses, click on the link provided below.

Cultural Diversity Course Requirement at JCCC (<http://catalog.jccc.edu/fall/degrecertificates/electives/cultural-diversity-courses-aa>)

(Major Code 2130; State CIP Code 41.0101)

- Science (<http://www.jccc.edu/science>)

Associate of Science Degree

First Semester

MATH 181	Statistics*	3
BIOL 135	Principles of Cell and Molecular Biology	4
CHEM 124	General Chemistry I Lecture*	4
CHEM 125	General Chemistry I Lab	1

Students who withdraw from GENERAL CHEMISTRY I LECTURE must also withdraw from the corresponding laboratory GENERAL CHEMISTRY I LABORATORY

Students may not withdraw from the laboratory course GENERAL CHEMISTRY I LABORATORY without withdrawing from CHEMISTRY I LECTURE.

SPD 121	Public Speaking	3
ENGL 121	Composition I*	3

Total Hours		18
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Second Semester

BIOT 160	Introduction to Biotechnology*	2
BIOL 150	Biology of Organisms*	5
CHEM 131	General Chemistry II Lecture*	4
CHEM 132	General Chemistry II Lab*	1

Students who withdraw from GENERAL CHEMISTRY II LECTURE must also withdraw from the corresponding laboratory GENERAL CHEMISTRY II LABORATORY.

Students may not withdraw from the laboratory course GENERAL CHEMISTRY II LABORATORY without withdrawing from CHEMISTRY II LECTURE.

ENGL 123	Technical Writing I*	3
HIST 125	Western Civilization: Readings and Discussion I	3

Total Hours		18
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Summer

BIOT 165	Laboratory Safety*	1
Social Science/Economics Elective ^		3
Total Hours		4

^ Social Science/Economics Elective (<http://catalog.jccc.edu/fall/degrecertificates/electives/social-sci-econ-as>)

Third Semester

BIOT 230	Microbiology for Biotechnology*	5
BIOL 205	General Genetics*	4
PHYS 130	General Physics I*	5
Social Science/Economics Elective ^		3
Physical Education Elective ^^		1
Total Hours		18

^ Social Science/Economics Elective (<http://catalog.jccc.edu/fall/degrecertificates/electives/social-sci-econ-as>)

^^ Physical Education Elective (<http://catalog.jccc.edu/fall/degrecertificates/electives/health-and-or-physical-ed-as>)

Fourth Semester

BIOT 260	Biotechnology Methods*	5
CHEM 220	Organic Chemistry I*	5
PHYS 131	General Physics II*	5
Humanities Elective ^		3
Total Hours		18

^ Humanities Elective (<http://catalog.jccc.edu/fall/degrecertificates/electives/humanities-as>)

Total Program Hours: 76**Optional Course**

BIOT 265	Biotechnology Internship*	4
Total Hours		4

With the OPTIONAL course: Total Program Hours: 80