## Biotechnology Certificate

Greater Kansas City 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 vocational certificate is for students seeking employment in the biotechnology industry either in private or academic research laboratories. This certificate will demonstrate to potential employers that the student has experience in performing a variety of techniques necessary for the day-to-day operation.

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).
(Major Code 6150; State CIP Code 41.0101)

- Gainful Employment - Biotechnology (http://www.jccc.edu/science/ge-voc-biotech.html)
- Science (http://www.jccc.edu/science)


## First Semester

| CHEM 122 | Principles of Chemistry | 5 |
| :--- | :---: | :---: |
| Total Hours | 5 |  |

## Second Semester

| BIOL 135 | Principles of Cell and Molecular Biology | 4 |
| :--- | :--- | ---: |
| BIOT 160 | Introduction to Biotechnology* | 2 |
| MATH 130 | Technical Mathematics I* | 3 |
| PHYS 133 | Applied Physics ${ }^{*}$ | 5 |
| Total Hours |  | 14 |

## Third Semester

| BIOT 165 | Laboratory Safety* | 1 |
| :--- | :--- | ---: |
| BIOT 230 | Microbiology for Biotechnology* | 5 |
| BIOT 260 | Biotechnology Methods* | 5 |
| CHEM 140 | Principles of Organic \& Biological Chemistry* | 5 |
| Total Hours |  | 16 |

## Fourth Semester (optional)

| BIOT 265 | Biotechnology Internship* | 4 |
| :--- | :--- | :--- |
| Total Hours | 4 |  |

Total Program Hours: 35-39

