

Biotechnology

Degree Type

Certificate

The Biotechnology Certificate emphasizes analytical and laboratory skills which are used across many biological disciplines. Students gain experience in hands-on applied techniques which focus on the development of current Good Laboratory Practices (cGLP) in relationship to laboratory procedure and documentation. Upon completion, students will have acquired the training necessary for entry level employment as technicians in academia, research, or manufacturing environments.

| Item # | Title | Credits |
|----------------------|-----------------------------|-----------|
| ENL101 | English Composition I | 3 |
| BIO151 | General Biology I | 4 |
| CHM151 | General Chemistry I | 4 |
| BIO110 | Understanding Biotechnology | 3 |
| BIO206 | Techniques in Biotechnology | 4 |
| BIO241 | Cell Biology | 4 |
| BIO242 | Molecular Genetics | 4 |
| Total Credits | | 26 |

Career Outlook

Labor market data shows a strong and growing need for technical support in the biological and biotechnological fields. Students who complete this certificate program may work as laboratory technicians in various departments within the biotechnology industry. These departments include, but are not limited to healthcare, production support, manufacturing, laboratory prep assistance, and quality control.

Program Outcomes

- Explain the fundamental scientific principles underlying biotechnology.
- Perform common biotechnological laboratory techniques.
- Follow Standard Operating Procedures (SOPs) and proper documentation guidelines.
- Accurately collect, analyze, and interpret experimental data.
- Utilize critical thinking and scientific methodology to analyze and/or troubleshoot biotechnological issues.
- Exhibit proper workplace behaviors including collaboration, time management, effective communication and presentation skills, and validation of data.