SCIENCE & MATHEMATICS

ASSOCIATE IN APPLIED SCIENCE

Biotechnology

CODE | COURSE | CREDITS | CODE | COURSE | CREDITS
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First Year/First Semester
ENG-101 English Composition I | 3 |
BIO-111 Biology I: Science | 4 |
BIT-102 Introduction to Biotechnology | 1 |
MTH-125 Accelerated Precalculus | 4 |
| 12 |
Second Semester
ENG 102 English Composition II | 3 |
BIO-221 Microbiology I | 4 |
CHM-111 Chemistry I: Science | 4 |
MTH-171 Statistics I or |
| 3/4 |
MTH-134 Biostatistics* |
HPE........ Health & Exercise Science Elective | 1 |
| 15/16 |
Summer Semester
CHM-112 Chemistry II: Science | 4 |
| 4 |
Total Minimum Credits | 63 |

*Biostatistics: MTH-140 (Calculus) pre-requisite or permission from Chair of Math Department.

PROGRAM DESCRIPTION

Biological technicians work with scientists studying living organisms. Many assist scientists who conduct medical research helping to find a cure for cancer or AIDS, for example. Those who work in pharmaceutical companies help develop and manufacture medicinal and pharmaceutical preparations. Those working in the field of microbiology generally work as lab assistants and studying living organisms and infectious agents. Biological technicians also analyze organic substances, such as blood, food and drugs, and some examine evidence in a forensic science laboratory. Biological technicians, working in biotechnology labs, use the knowledge and techniques gained from basic research by scientists, including gene splicing and recombinant DNA, and apply them in product development.

The Biotechnology program will prepare students for entry-level positions in industries involving the field of biotechnology. These industries include pharmaceuticals, university and private research laboratories, medical technology and biotechnology companies. Biotechnology companies need associate degree-trained technicians to work in the laboratories and help in the preparation and documentation of laboratory experiments and their results. These technicians must have knowledge of the workings of a laboratory and how to conduct and work with equipment used in the biotechnology field.

PROGRAM GOALS

• To provide a concentration of course work appropriate for biotechnology students.
• To prepare students for entry-level employment as a technician in the biopharma field.
• To demonstrate the basic techniques used in the biotechnology industry.

PROGRAM STUDENT LEARNING OUTCOMES

At the end of the program, the graduate will be able to:
1. Work safely in a laboratory.
2. Analyze samples using modern computer interfaced instrumentation.
3. Analyze and present data in multiple formats (graphic, oral and written).
4. Explain the fundamental concepts of biology and chemistry.

EMPLOYMENT OPPORTUNITIES

• Entry-level position in Biotechnology industries
• Research laboratories
• Pharmaceutical industry
• Laboratory technician

CONTACT PERSON

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Biotechnology

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