

BIOTECHNOLOGY I: BASIC WET LAB SKILLS (CERT)

CERTIFICATE OF ACHIEVEMENT

Biotechnology utilizes biological systems or living organisms to create products and solve real-world problems. From employing bacteria to produce human insulin, to genetically changing a patient's own immune system cells so they can better fight cancer, the biotech industry continues to expand and innovate. By acquiring a certificate of achievement in biotechnology, students will attain the necessary fundamentals in biology, chemistry, and wet-lab skills for entry-level positions in biotechnology-related laboratories and facilities, like manufacturing technician and laboratory assistant. The courses required for this certificate provide students the option of pursuing the Biotechnology Level 2 certificate, which focuses on skills needed for jobs in Biomanufacturing, and the Associate of Science degree in Biotechnology.

Program Student Learning Outcomes

- Demonstrate the importance of maintaining a safe and productive work environment through utilizing safety data sheets, appropriate personal protective equipment, and following relevant safety guidelines and procedures.
- Safely operate and troubleshoot standard industry equipment and instrumentation.
- Perform standard industry techniques according to established procedures or instructions, faithfully document data and results according to established procedures, and interpret results as appropriate.
- Perform calculations related to solution preparation and data analysis.

Program Requirements

Code Number	Course Title	Units
Required Courses		
BIOL 120	Introduction To Biological Science	4.0
CHEM 110	Elementary Chemistry	4.0
BTEC 120	Introduction to Biotechnology	4.0
ET 103	Industrial Process Control	2.0
MATH 112	Elementary Statistics	4.0
Total Units		18