

# BIOTECHNOLOGY MANUFACTURING OPERATOR, CERTIFICATE OF ACHIEVEMENT

The Biotechnology Manufacturing Operator Certificate of Achievement offers fundamental skills often needed for entry-level positions in biotechnology manufacturing.

To earn a Certificate of Achievement for Biotechnology Manufacturing Operator, students must complete 12-13 specified units.

Course ID	Title	Units/ Hours
<b>Required Courses</b>		
BIOL M01 or BIOL M02A BIOL M02AH	Introduction to Biology General Biology I Honors: General Biology I	4-5
BIOT M10 or BIOL M13	Introduction to Biotechnology and Molecular Biology Introduction to Biotechnology and Molecular Biology	4
BIOT M02A or BIOL M12A	Environmental Control and Process Support Environmental Control and Process Support	2
BIOL M12B or BIOT M02B	Manufacturing: Quality Control and Validation Manufacturing: Quality Control and Validation	2
<b>Total Units</b>		<b>12-13</b>

Year 1		
Fall Semester		Units/Hours
BIOT M10	Introduction to Biotechnology and Molecular Biology	4
BIOT M02A	Environmental Control and Process Support	2
	<b>Units/Hours</b>	<b>6</b>
Spring Semester		
BIOL M01 or BIOL M02A	Introduction to Biology or General Biology I	4
BIOT M02B	Manufacturing: Quality Control and Validation	2
	<b>Units/Hours</b>	<b>6</b>
	<b>Total Units/Hours</b>	<b>12</b>

Upon successful completion of this program, students will be able to:

- work successfully in a clean room environment and understand Quality Control and Validation principles.