Manufacturing and Quality Operations in Biotechnology, Graduate Certificate

The graduate certificate in manufacturing and quality operations has been designed in response to a need in the biotechnology industry for individuals with an advanced knowledge of the principles and practices of state-of-the-art biopharmaceutical manufacturing and quality operations. In particular, the focus of this certificate is training the workforce to ensure quality medicines are produced. Individuals, particularly those who are working in the various sectors of biotechnology including basic research of biological systems, discovery, development, and manufacturing of biopharmaceuticals, have an opportunity to improve their competency and learn new practical skills, which enables them to increase productivity and further contribute to their professions.

Program Requirements

Complete all courses and requirements listed below unless otherwise indicated.

Core Requirements

Code	Title	Hours
BIOT 6300	Pharmaceutical Microbiology	3
BIOT 6310	CGMP Statutes and Regulation	3
BIOT 6320	Quality Management Systems and Validation	3
BIOT 6340	Sterile Manufacturing Operations	3

Program Credit/GPA Requirements

12 total semester hours required
Minimum 3.000 GPA required