## Biopharmaceutical Analytical Sciences, Graduate Certificate

The Graduate Certificate in Biopharmaceutical Analytical Sciences 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 analyses of protein with focus on the characterization of innovator and biosimilars. 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 that enable them to increase productivity and further contribute to their professions. In addition, the certificate was designed for both individuals with and without experience in biopharmaceuticals and their analysis.

## **Program Requirements**

- Concentrations and course offerings may vary by campus and/or by program modality. Please consult with your advisor or admissions coach for the course availability each term at your campus or within your program modality.
- Certain options within the program may be required at certain campuses or for certain program modalities. Please consult with your advisor or admissions coach for requirements at your campus or for your program modality.

Complete all courses and requirements listed below unless otherwise indicated.

Core Requirements		
Code	Title	Hours
BIOT 6290	Foundation in Quality for Biotechnology	3
BIOT 6320	Design and Development of Biopharmaceuticals	3
CHEM 5550	Introduction to Glycobiology and Glycoprotein Analysis	3
CHEM 5617	Protein Mass Spectrometry Laboratory	3

## **Program Credit/GPA Requirements**

12 total semester hours required Minimum 3.000 GPA required