

BIOPROCESSING UNDERGRADUATE CERTIFICATE ELECTIVES

- for the most current course list, please consult the School of Sustainable Chemical, Biological & Materials Engineering.

Code	Title	Credit Hours
CH E/BME 4373	Tissue Engineering	3
CH E/BME 5373	Tissue Engineering	3
CH E 4203/5203	Bioengineering Principles	3
DSA 5103	Intelligent Data Analytics	3
AME 5003	Introduction to Structural Health Monitoring	3
BIOL 3113	Cell Biology	3
BIOL 5394	Advanced Light Microscopy	4
BIOL 5364	Principles and Techniques of Transmission Electron Microscopy	4
BIOL 5374	Principles and Techniques of Scanning Electron Microscopy	4
BIOL 4823	Pathogenic Microbiology and Infectious Disease	3
BIOL 3333	Genetics	3
BIOL 4843/5843	Molecular Biology	3
BIOL 4903/5903	Topics in Virology	3
BIOL 4113/5113	Cellular Pathology	3
BME 3123	Biotransport	3
BIOL 4533	Basic Immunology	3
BIOL 3813	Fundamentals of Microbiology	3
BIOL 3673	Practical Bioinformatics	3
BIOL 4853	Physiology of Microorganisms	3
CHEM 3653	Introduction to Biochemistry	3
CHEM 3853	Biochemistry I	3
CHEM 3953	Biochemistry II	3
CHEM 3753	Introduction to Biochemical Methods	3
CHEM 4023	Instrumental Methods of Chemical Analysis	3
CHEM 5210	Molecular Biology	1-3
CHEM 5240	Biochemical and Biophysical Methods	1-3
CHEM 5100	Instrumental Methods of Analysis	1-3
CHEM 5110	Spectroscopic Chemical Analysis	1-3
CHEM 5200	Principles of Biochemistry	1-3
DSA/ISE 5503	Healthcare Analytics	3
ISE 3293	Applied Engineering Statistics	3
ECE 4863	Bioinstrumentation	3