GRADUATE CERTIFICATE IN BIOMATERIALS AND TISSUE ENGINEERING

This graduate certificate provides biomedical engineering students, engineering professionals, and eligible individuals from other disciplines with specialized training in biomaterials and tissue engineering. Students understand materials by properties, processing, and economics for biomedical and biotechnology applications. Students gain knowledge of biomaterials used in medical devices and analyze functionalities of various biological species in tissue engineering and to identify design materials for biological engineering purposes.

Students interested in graduate work should refer to CSU's Graduate and Professional Bulletin (https://catalog.colostate.edu/general-catalog/graduate-bulletin/) and the School of Biomedical and Chemical Engineering website.

Learning Objectives

Students will:

1. Demonstrate the ability to think critically about bioengineering concepts in emerging areas of tissue engineering and biomaterials.
2. Effectively communicate biomaterials concepts in both written and oral form. Communicate effectively with technical experts in the field, and with experts from related fields who do not have specific backgrounds in tissue engineering or biomaterials.
3. Demonstrate the ability to assimilate advanced knowledge from disciplines of science and engineering to broaden their expertise tissue engineering and biomaterials.

Requirements
Effective Fall 2020

Additional coursework may be required due to prerequisites.

Code	Title	Credits
BIOM 570/MECH 570	Bioengineering	3
Select any three courses:		9
BIOM 525/ MECH 525	Cell and Tissue Engineering	
BIOM 531/ MECH 531	Materials Engineering	
BIOM 573/ MECH 573	Structure and Function of Biomaterials	
BIOM 574/ MECH 574	Bio-Inspired Surfaces	
Program Total Credits:		**12**

*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.