Certificate in Biomaterials Engineering

The Certificate in Biomaterials Engineering will prepare engineering students to work in biomaterials related jobs and disciplines. Students will be provided the opportunity to pursue educational objectives beyond those normally associated with their academic major in engineering. Certificate holders will be trained in various skills in order to design, synthesize, process, characterize, analyze, deploy, and select materials for bio-engineering applications ranging from tissue engineering to implantable devices to prosthetic devices.

Requirements

The 12-credit hour Certificate in Biomaterials Engineering is offered as a stand-alone certificate. Many of the courses offered for the certificate program can be counted towards engineering technical elective requirements for graduation within the students major.

Required Courses		
BIOL_EN 3075	Introduction to Materials Engineering	3
or BME 3075	Introduction to Materials Engineering	
BIOL_EN 3170	Biomaterials	3
or BME 3170	Biomaterials	
BIOL_EN 4170	Biomaterials Interfaces of Implantable Devices	3
or BME 4170	Biomaterials Interfaces of Implantable Devices	
Elective Courses		
BIOL_EN 4231	Transport Phenomena in Materials Processing	3
BIOL_EN 4360	Biomanufacturing Technologies	3
or BME 4360	Biomanufacturing Technologies	
BIOL_EN 4370	Orthopaedic Biomechanics	3
or BME 4370	Orthopaedic Biomechanics	
BIOL_EN 4480	Physics and Chemistry of Materials	3
or BME 4480	Physics and Chemistry of Materials	

Contact

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