



NEW/CHANGE PROGRAM REQUEST
Undergraduate Programs

**FLORIDA
ATLANTIC
UNIVERSITY**

Department Ocean & Mechanical Engineering
College COECS

UUPC Approval 4-26-21
 UFS Approval _____
 Banner Posted _____
 Catalog _____

Program Name

Undergraduate Certificate Program in Biomedical Engineering

New Program

Change Program

Effective Date
(TERM & YEAR)

Fall 2021

Please explain the requested change(s) and offer rationale below or on an attachment

This undergraduate certificate program (a total of 15 credits) in biomedical engineering offered by O&ME Department is designed to integrate broad engineering disciplines with interdisciplinary knowledge of science and healthcare specific to biomedical engineering. The main mission of this program is to educate and prepare students in the fields of biomedical engineering by integrating engineering, science, and healthcare such that they can be placed in the best medical, graduate and industry positions across the globe.

See attached file for Curriculum requirements.

Faculty Contact/Email/Phone

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Consult and list departments that may be affected by the change(s) and attach documentation

Approved by

Department Chair

Maurice Green

College Curriculum Chair

Daniel Macroff

College Dean

Fred Bloetscher

UUPC Chair

Jerry Haky

Undergraduate Studies Dean

Edward Pratt

UFS President

Provost

Date

4-2-21

4-15-21

4-15-21

4-26-21

4-26-21

Email this form and attachments to mjenning@fau.edu one week before the UUPC meeting so that materials may be viewed on the UUPC website prior to the meeting.

Undergraduate Certificate Program in Biomedical Engineering (15 credits)

This undergraduate certificate program (a total of 15 credits) in biomedical engineering offered by O&ME Department is designed to integrate broad engineering disciplines with interdisciplinary knowledge of science and healthcare specific to biomedical engineering. The main mission of this program is to educate and prepare students in the fields of biomedical engineering by integrating engineering, science, and healthcare such that they can be placed in the best medical, graduate and industry positions across the globe.

Curriculum

To earn this certificate, a student must successfully complete the following:

1. Three courses (9 credits) in the field of biomedical engineering as follows:
 - BME 4100 Biomaterials/BME 6105 Biomaterials (3 credits)
 - BME 4581 Introduction to Microfluidics/BME 6585 Microfluidics and BioMEMS (3 credits)
 - BME 4361 Neural Engineering (3 credits)

2. A faculty mentored design/research project with elements of Biomedical Engineering (3 credits), carried out either as part of:
 - A capstone design project (EML 4551) course (3 credit)Or as a
 - EGN 4915 Directed Independent Research (3 credits)

3. Another course (3 credits) from the following
 - EGN 3365 Engineering Materials I
 - EML 3701 Fluid Mechanics
 - EGM 4523C Intermediate Strength of Materials