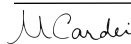
 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Graduate Programs	UGPC Approval _____ UFS Approval _____ Banner _____ Catalog _____
	Department Comp. and Electrical Eng and Comp. Science College Engineering and Computer Science	
Program Name Current name: Bioengineering Certificate Change to: Biomedical Engineering Certificate	<input type="checkbox"/> New Program* <input checked="" type="checkbox"/> Change Program*	Effective Date <i>(TERM & YEAR)</i> Spring 2021
<p>Please explain the requested change(s) and offer rationale below or on an attachment.</p> <p>This proposal requests to change the name of the program from Bioengineering Certificate to Biomedical Engineering Certificate. This change is driven by the research expertise and activity of our faculty in areas of biomaterials, tissue engineering, neuroengineering, medical image analysis, and smart health. The catalog change is attached.</p> <p>CIP code: 14.0501 "Bioengineering and Biomedical Engineering. A program that prepares individuals to apply mathematical and scientific principles to the design, development and operational evaluation of biomedical and health systems and products such as integrated biomedical systems, instrumentation, medical information systems, artificial organs and prostheses, and health management and care delivery systems. Examples: [Cell and Tissue Engineering], [Neural Engineering], [Biomaterials Engineering]."</p>		
<p><small>*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.</small></p>		
Faculty Contact/Email/Phone Hanqi Zhuang/zhuang@fau.edu/561-297-3413	Consult and list departments that may be affected by the change(s) and attach documentation Department of Biomedical Science	
Approved by Department Chair _____ Hanqi Zhuang College Curriculum Chair _____ Francisco Presuel-Moreno College Dean _____  UGPC Chair _____ UGC Chair _____ Graduate College Dean _____ UFS President _____ Provost _____	Digitally signed by Hanqi Zhuang Date: 2020.10.06 19:12:13 -04'00' Digitally signed by Francisco Presuel-Moreno DN: cn=Francisco Presuel-Moreno, ou=Florida Atlantic University, ou=Ocean and Mechanical Engineering, email=fpresuel@fau.edu, c=US Date: 2020.10.07 08:44:04 -04'00' Digitally signed by Mhualla Carder cn=Mhualla Carder, ou=Florida Atlantic University, ou=Engineering and Computer Science, c=US Date: 2020.10.11 14:27:14 -04'00'	Date _____ _____ 10/11/2020 _____ _____ _____ _____

Email this form and attachments to UGPC@fau.edu 10 days before the UGPC meeting.

Biomedical Engineering Bioengineering Certificate

The College offers a graduate non-degree-seeking certificate in [Biomedical Engineering Bioengineering](#). This certificate program is a practice-oriented, part-time graduate program designed to assist engineers, scientists, technical professionals and qualified senior undergraduates in the launch and/or development of their careers and to provide the technical expertise needed in the rapidly changing business, government and industrial environments.

Program Highlights

This is a 15-credit graduate non-degree-seeking certificate program focused on the application of engineering and computer science principles to biotechnology, bioinformatics and biosystems. It is designed for engineers and scientists working in the biotechnology, pharmaceutical, health care, drug discovery, biomedical, medical instrumentation and allied sectors.

Admission Requirements

The applicant must satisfy the following criteria:

1. A bachelor's degree in biology, chemistry, physics or engineering with a mathematics background through Calculus 2 or calculus with basic differential equations. Qualified senior undergraduates may be accepted into the graduate certificate program with appropriate committee recommendation;
2. GPA of 3.0 in science, mathematics and engineering courses;
3. No GRE scores are necessary. Student transcripts should demonstrate competency in science, mathematics and engineering coursework.

Certificate Requirements

1. PCB 3063, Genetics, (or an equivalent course) as a deficiency requirement with a minimum grade of "C";
2. 9 credits of [Biomedical Engineering Bioengineering](#) courses such as Introduction to [Bioengineering Biomedical Engineering](#), Biosystems Modeling and Control, Bioinformatics: [Bioengineering Biomedical](#) Perspectives, Tissue Engineering, Stem Cell Engineering, Biomaterials, Introduction to Microfluidics and BioMEMS, Introduction to Robotics, NanoBiotechnology, Robotic Applications and Orthopedic Biomechanics, Medical Imaging and Bio-Signal Processing;
3. 6 credits of Science courses relevant to [Biomedical Engineering Bioengineering](#) such as Special Topics (Advanced Biotechnology Lab), Bioinformatics and Neuroscience 1 and 2;
4. The grade point average of the above 15 credits must be 3.0 or better.
5. All courses must be at the 5000 and 6000 levels.