

 <b>FLORIDA ATLANTIC UNIVERSITY</b>	<b>NEW/CHANGE PROGRAM REQUEST</b> <b>Undergraduate Programs</b>	UUPC Approval <u>4-26-21</u> UFS Approval _____ Banner Posted _____ Catalog _____
	Department <u>Ocean &amp; Mechanical Engineering</u> College <u>COECS</u>	
<b>Program Name</b> Undergraduate Certificate Program in Robotics Engineering	<input checked="" type="checkbox"/> <b>New Program</b> <input type="checkbox"/> <b>Change Program</b>	<b>Effective Date</b> (TERM & YEAR) Fall 2021
<b>Please explain the requested change(s) and offer rationale below or on an attachment</b>  This undergraduate certificate program (a total of 15 credits) in robotics engineering offered by O&ME Department is designed to combine broad engineering disciplines with knowledge of engineering principles specific to robotics engineering. This program is in support of preparing students to work at broad range of engineering companies.  See attached file for Curriculum requirements.		
<b>Faculty Contact/Email/Phone</b> Dr. Davood Moslemian/moslemia@fau.edu	<b>Consult and list departments that may be affected by the change(s) and attach documentation</b>	
<b>Approved by</b> Department Chair <u>Mambray</u> College Curriculum Chair <u>Daniel Mesroff</u> College Dean <u>Fred Bloetscher</u> UUPC Chair <u>Jerry Haky</u> Undergraduate Studies Dean <u>Edward Pratt</u> UFS President _____ Provost _____	<b>Date</b> <u>4-12-21</u> <u>4-15-21</u> <u>4-15-21</u> <u>4-26-21</u> <u>4-26-21</u> _____ _____	

Email this form and attachments to [mjenning@fau.edu](mailto: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 Robotics Engineering**

This undergraduate certificate program (a total of 15 credits) in robotics engineering offered by O&ME Department is designed to combine broad engineering disciplines with knowledge of engineering principles specific to robotics engineering. This program is in support of preparing students to work at broad range of engineering companies.

#### **Curriculum**

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

- 1) Three courses (9 credits) in the field of robotic engineering from the following list:
  - EML 4800 Introduction to Robotics (3 credits)
  - EIN 5603C Industrial Automation (3 Credits)
  - EML 4804 Mechatronics (3 credits)
  - EGN 4670C Innovative Sensing and Actuation Technologies (3 credits)
  
- 2) A faculty mentored design/research project with elements of Robotics 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) One course (3 credits) from the following:
  - EGN 3365 Engineering Materials I (3 credits)
  - EML 4312 Mechanical Control Systems (3 credits)
  - EML 4500 Machine Design (3 credits)