

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Undergraduate Programs	UUPC Approval <u>4-26-21</u> UFS Approval _____ Banner Posted _____ Catalog _____
	Department Ocean & Mechanical Engineering College COECS	
Program Name Undergraduate Certificate Program in Aerospace Engineering	<input checked="" type="checkbox"/> New Program <input type="checkbox"/> 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 aerospace engineering offered by O&ME Department is designed to combine broad engineering disciplines with knowledge of engineering principles specific to aerospace engineering. This program is in support of preparing students to work at aerospace companies and governmental agencies such as the National Aeronautics and Space Administration. See attached file for Curriculum requirements.		
Faculty Contact/Email/Phone Dr. Davood Moslemian/moslemia@fau.edu	Consult and list departments that may be affected by the change(s) and attach documentation	
Approved by Department Chair <u>Mansour Amini</u> College Curriculum Chair <u>Daniel Meeroff</u> College Dean <u>Fred Bloetscher</u> UUPC Chair <u>Jerry Haky</u> Undergraduate Studies Dean <u>Edward Pratt</u> UFS President _____ Provost _____		Date <u>4-2-21</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 mjennning@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 Aerospace Engineering

This undergraduate certificate program (a total of 15 credits) in aerospace engineering offered by O&ME Department is designed to combine broad engineering disciplines with knowledge of engineering principles specific to aerospace engineering. This program is in support of preparing students to work at aerospace companies and governmental agencies such as the National Aeronautics and Space Administration.

Curriculum

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

- 1) Three courses (9 credits) in the field of aerospace engineering as follows:
 - EAS 4101 Aerodynamics (3 credits)
 - EML 4401 Principles of Turbomachinery /6402 Turbomachinery (3 credits)
 - EAS 4010 Flight Dynamics (3 credits)

- 2) A faculty mentored design/research project with elements of Aerospace 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 3701 Fluid Mechanics (3 credits)
 - EGM 4350 Finite Element Analysis for Engineers (3 credits)
 - EML 4500 Machine Design (3 credits)
 - EGN 4432 Dynamic Systems (3 credits)
 - EML 4127 Applied Thermal Fluid Systems (3 credits)