

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Undergraduate Programs	UUPC Approval <u>1/29/24</u> UFS Approval _____ Banner Posted _____ Catalog _____
	Department _____ College _____	
Program Name Marine Materials & Offshore Engineering	New Program Change Program	Effective Date (TERM & YEAR)
Please explain the requested change(s) and offer rationale below or on an attachment		
Faculty Contact/Email/Phone	Consult and list departments that may be affected by the change(s) and attach documentation	
Approved by Department Chair <u>Pierre Philippe Beaujean</u> College Curriculum Chair <u>Hengbo Su</u> College Dean <u>[Signature]</u> UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Meeroff</u> UFS President _____ Provost _____	Date 1/5/2024 1/16/2024 1-16-24 1/29/24 1/29/24 _____ _____	

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.

Proposed Program: Undergraduate Certificate Program in Marine Materials and Offshore Engineering

This undergraduate certificate program (a total of 15 credits) in Marine Materials and Offshore Engineering offered by the OME Department is designed to combine broad engineering disciplines with knowledge of engineering principles specific to materials and structures. This program is in support of preparing students to work at ocean engineering/maritime companies and governmental agencies that specialize in marine materials and offshore structures.

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

- a) EGN 3331 Strength of Materials (3 credits)

- b) Two courses (6 credits) in the field of engineering materials and structures:
 - EOC 4201C Marine Materials & Corrosion (3 credits)
 - EOC 4412 Ocean Structures (3 credits) or EOC 6432 Offshore Structures (3 credits)

- c) One course (3 credits) from the following list:
 - EOC 4600 Introduction to Ocean Instrumentation (3 credits) or EOC 6625 Ocean Instrumentation (3 credits)
 - EGN 4915 DIR (3 credits)
 - IDS 3949 Internship (3 credits in related areas)
 - EGM 4350 Finite Element Analysis in Engineering Design (3 credits)

- d) A faculty-mentored design project with elements of marine materials and offshore engineering (3 credits):
 - RI: OE Systems Control and Design (EOC4804) course (3 credits)

Current Program:

MARINE MATERIALS AND OFFSHORE ENGINEERING UNDERGRADUATE CERTIFICATE

(Minimum of 15 credits required)

The undergraduate certificate in Marine Materials and Offshore Engineering, offered by the Ocean and Mechanical Engineering Department, is designed to combine broad engineering disciplines with knowledge of engineering principles specific to materials and structures. This 15-credit program supports the preparation of students to work at ocean engineering/maritime companies and governmental agencies that specialize in marine materials and offshore structures.

Curriculum

To earn this certificate, a student must successfully complete the following 15 credits:

1. Three courses (9 credits) in the field of engineering materials and structures:

Finite Element Analysis for Engineering Design	EGM 4350
Marine Materials and Corrosion	EOC 4201C
Special Topics in Ocean Engineering	EOC 5934
Ocean Structures	EOC 4412
Special Topics in Ocean Engineering	EOC 5934

2. A faculty-mentored design/research project with elements of marine materials and offshore engineering (3 credits), carried out either as part of:

RI: Ocean Engineering Systems Control and Design	EOC 4804
Directed Independent Research in Engineering and Computer Science	EGN 4915
Directed Independent Study	EOC 4905

3. One additional course (3 credits): EGN 3331, Strength of Materials.