

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Undergraduate Programs		UUPC Approval <u>1/29/24</u> UFS Approval _____ Banner Posted _____ Catalog _____
	Department Ocean & Mechanical Engineering College COECS		
Program Name Undergraduate Certificate Program in Naval Architecture	<input type="checkbox"/> New Program <input checked="" type="checkbox"/> Change Program	Effective Date (TERM & YEAR) Fall 2024	
<p>Please explain the requested change(s) and offer rationale below or on an attachment</p> <p style="text-align: center;"><i>Naval Architecture</i></p> <p>This undergraduate certificate program (a total of 15 credits) in Marine Materials & Offshore Engineering offered by O&ME 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. The proposed change in the requirements for this program will provide more flexibility to the students.</p>			
Faculty Contact/Email/Phone Dr. P. Edgar An/pan@fau.edu/561-297-2792		Consult and list departments that may be affected by the change(s) and attach documentation	
Approved by		Date	
Department Chair <u>Pierre Philippe Beaujean</u>		<u>1/5/2024</u>	
College Curriculum Chair <u>Hongbo Su</u>		<u>1/16/2024</u>	
College Dean <u>[Signature]</u>		<u>1-16-24</u>	
UUPC Chair <u>Korey Sorge</u>		<u>1/29/24</u>	
Undergraduate Studies Dean <u>Dan Meeroff</u>		<u>1/29/24</u>	
UFS President _____		_____	
Provost _____		_____	

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 Naval Architecture

This undergraduate certificate program (a total of 15 credits) in Naval Architecture offered by the OME Department is designed to combine broad engineering disciplines with knowledge of engineering principles specific to naval architecture. This program is in support of preparing students to work at companies and governmental agencies that specialize in ship design and naval architecture.

Curriculum

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

- a) EOC 4422 Ocean Wave Mechanics (3 credits)
- b) Two courses (6 credits) in the field of naval architecture from the following list:
 - EOC 4124 Ship Hydrodynamics (3 credits) or EOC 6515 Hydrodynamic Aspects of Ship Design (3 credits)
 - EOC 4412 Ocean Structures (3 credits) or EOC 6432 Offshore Structures (3 credits)
 - EOC 4510 Introduction to Ship Structural Design (3 credits) or EOC 6516 Ship Structural Design (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 naval architecture (3 credits):
 - RI: OE Systems Control and Design (EOC4804) course (3 credits)

Current Program:

**NAVAL ARCHITECTURE
UNDERGRADUATE CERTIFICATE**

(Minimum of 15 credits required)

This undergraduate certificate in Naval Architecture, offered by the Ocean and Mechanical Engineering Department, is designed to combine broad engineering disciplines with knowledge of engineering principles specific to naval architecture. This 15-credit program supports the preparation of students to work at ocean engineering/maritime companies and governmental agencies that specialize in ship design and naval architecture.

Curriculum

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

1. Three courses (9 credits) in the field of naval architecture:

Ship Hydrodynamics	EOC 4124
Special Topics in Ocean Engineering	EOC 5934
Ocean Structures	EOC 4412
Special Topics in Ocean Engineering	EOC 5934
Introduction to Ship Design	EOC 4510
Ship Structural Design	EOC 6516
Introduction to Ocean Instrumentation	EOC 4620
Ocean Instrumentation	EOC 6625

2. A faculty-mentored design/research project with elements of naval architecture (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): EOC 4422, Ocean Wave Mechanics.