FLORIDA ATLANTIC UNIVERSITY

NEW/CHANGE PROGRAM REQUEST
Undergraduate Programs

UUPC Approval 3-30-26
UFS Approval _____
Banner Posted _____
Catalog _____

Department Ocean & Mechanical Engineering

College COECS

Program Name
Ocean Engineering

☐ **New Program**
☑ **Change Program**

Effective Date
(TERM & YEAR)
Fall 2026

Please explain the requested change(s) and offer rationale below or on an attachment

Students who are entering with an AA degree or over 60 credits who have not taken EGN1002 may substitute an upper-level technical elective to meet the program requirement.

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	Pierre Pholippe Beaujean	
College Curriculum Chair	Galan Liu	3/17/26
College Dean		3/17/26
UUPC Chair	Korey Sorge	3-30-26
Undergraduate Studies Dean	Dan Meeroff	3-30-26
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 Change: To allow transfer students to opt out of EGN 1002 (Fundamentals of Engineering) and replace it with a technical elective. The proposed changes are highlighted in the following sample four-year program of study.

Sample Four-Year Program of Study for Bachelor of Science in Ocean Engineering

First Year, Fall (14 credits)

Course Title	**Course Number**	**Credits**
College Writing 1*	ENC 1101	3
General Chemistry 1	CHM 2045	3
General Chemistry 1 Lab	CHM 2045L	1
Calculus with Analytic Geometry 1	MAC 2311	4
Fundamentals of Engineering*****	EGN 1002	3

First Year, Spring (14 credits)

Course Title	**Course Number**	**Credits**
College Writing 2*	ENC 1102	3
Oceanography	OCE 3008	3
General Physics for Engineers 1	PHY 2048	3
General Physics 1 Lab	PHY 2048L	1

Calculus with Analytic Geometry 2	MAC 2312	4

First Year, Summer (7 credits)

Course Title	Course Number	Credits
Calculus with Analytic Geometry 3	MAC 2313	4
General Education Curriculum Humanities course		3

Second Year, Fall (13 credits)

Course Title	Course Number	Credits
Engineering Math 1	MAP 3305	3
Physics for Engineers 2	PHY 2044	3
General Physics 2 Lab	PHY 2049L	1
Statics	EGN 3311	3
C for Engineers	EEL 2161	3

Second Year, Spring (15 credits)

Course Title	Course Number	Credits
Engineering Graphics***	EGN 1111C	3
Dynamics	EGN 3321	3

Strength of Materials	EGN 3331	3
Engineering Thermodynamics	EGN 3343	3
Ocean Engineering Lab	EOC 3130L	3

Second Year, Summer (6 credits)

Course Title	Course Number	Credits
Electro-Mechanical Devices	EGM 4045	3
General Education Curriculum Humanities course*		3

Third Year, Fall (13 credits)

Course Title	Course Number	Credits
Engineering Materials 1	EGN 3365	3
Vibrations Synthesis and Analysis	EGN 4323	3
Ocean Engineering Fluid Mechanics	EOC 3123	4
General Education Curriculum Additional Enrichment course*		3

Third Year, Spring (13 credits)

Course Title	Course Number	Credits
Dynamic Systems	EGN 4322	3

Fabrication of Ocean Engineering Systems	EOC 2801	1
Acoustics for Ocean Engineers	EOC 3306	3
Structural Analysis	EOC 3410C	3
Ship Hydrodynamics	EOC 4124	3 or
Marine Materials and Corrosion	EOC 4201C	3

Third Year, Summer (6 credits)

Course Title	Credits
General Education Curriculum Additional Enrichment course	3
General Education Curriculum Social Science course	3

Fourth Year, Fall (13 credits)

Course Title	Course Number	Credits
Materials 1 - Marine Topics	EOC 3213	1
Ocean Thermal Systems	EOC 4193	3
Ocean Wave Mechanics	EOC 4422	3
Ocean and Environmental Data Analysis	EOC 4631C	3
RI: Ocean Engineering Systems Control and Design	EOC 4804	3

Fourth Year, Spring (13 credits)

Course Title	Course Number	Credits
Finite Element Analysis for Engineering Design	EGM 4350	3 or
Innovative Sensing and Actuation Technologies	EGN 4670C	3 or
Professional Internship	IDS 3949	3 or
Directed Independent Research in Engineering and Computer Science	EGN 4915	1-3
Underwater Acoustics****	EOC 4307C	3 or
Ocean Structures****	EOC 4412	3
RI: Ocean Engineering Systems Control and Design Laboratory	EOC 4804L	4
General Education Curriculum Social Science course		3
Total		127

* WAC (College-Level Communication Skills, formerly Gordon Rule) course.
** Engineering Graphics should typically be taken at FAU.
*** Choose one course from these two courses.
**** Choose two courses from these four senior elective courses.

***** For those students entering with a B.S. degree or over 60 credits who have not taken EGN1002, they may substitute an upper-level technical elective to meet this requirement.