FLORIDA ATLANTIC UNIVERSITY Program Name Ocean Engineerin		rograms eering	UUPC Approval //29/24 UFS Approval Banner Posted Catalog Effective Date (TERM & YEAR)
Please explain	the requested change(s) and offer ra	Change Program	Fall 2024 attachment
	213 (Comp Apps I) with EEL 2161 (C for hat are related to this change (EGN 4432		
Faculty Contact/ Dr. P. Edgar An / pa	Email/Phone an@fau.edu / 561-297-2792	Consult and list department the change(s) and attach	nents that may be affected by a documentation
Approved by Department Chair College Curriculum College Dean UUPC Chair Undergraduate St UFS President	Mair Hongbo Su Korey Sor	ge	1/16/2024 1/16/2024 1-16-24 1/29/24 1/29/24

Email this form and attachments to $\underline{mjenning@fau.edu}$ one week before the UUPC meeting so that materials may be viewed on the UUPC website prior to the meeting.

Provost



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MEMORANDUM

TO: UUPC

FROM: P. Edgar An, Department of Ocean and Mechanical Engineering

SUBJECT: Requested Ocean Engineering Curricular Changes

DATE: January 4, 2024

1. Programming Course Change

The OE Program is proposing to drop EGN 2213 (Comp Apps I, 3 credit hours) from its existing curriculum, and replace it with EEL 2161 (C For Engineers, 3 credit hours).

University Catalog Changes

Ocean Engineering Core			
C for Engineers	EEL 2161	3	
Computer Applications in ME I	EGN 2213	3	
Electro-Mechanical Devices	EGM 4045	3	
Fundamentals of Engineering	EGN 1002	3	
Statics	EGN 3311	3	
Dynamics	EGN 3321	3	
Strength of Materials	EGN 3331	3	
Engineering Thermodynamics	EGN 3343	3	
Engineering Materials 1	EGN 3365	3	
Vibration Synthesis and Analysis	EGN 4323	3	
Dynamic Systems	EGN 4432	3	
Fabrication of OE Systems	EOC 2801	1	
Ocean Engineering Fluid Mechanics	EOC 3123	4	
Ocean Engineering Lab	EOC 3130L	3	
Materials 1 – Marine Topics	EOC 3213	1	
Acoustics for Ocean Engineers	EOC 3306	3	
Structural Analysis	EOC 3410C	3	
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	
RI: Ocean Engineering Systems Control and Design Laboratory	EOC 4804L	4	
Choose one of the following three junior elec	tive courses:		
Innovative Sensing and Actuation Technology	EGN 4670C	3	
Finite Element Analysis for Engineering Design	EGM 4350	3	
Internship	IDS 3949	3	
Choose two of the following four courses:			
Ocean Structures	EOC 4412	3	
Ship Hydrodynamics	EOC 4124	3	
Underwater Acoustics	EOC 4307C	3	
Marine Materials and Corrosion	EOC 4201C	3	

First Year, Fall (14 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)		
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)		
Calculus with Analytic Geometry 3	MAC 2313	4
Foundations of Humanities course		3

Second Year, Fall (13 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
Computer Applications in ME I	EGN 2213	3

Second Year, Spring (15 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)		
Electro-Mechanical Devices	EGM 4045	3
Foundations of Humanities course*		3

Third Year, Fall (13 credits)		
Engineering Materials 1	EGN 3365	3
Vibrations Synthesis and Analysis	EGN 4323	3
Ocean Engineering Fluid Mechanics	EOC 3123	4
Foundations of Global Citizenship course*		3

Third Year, Spring (13 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	

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Third Year, Summer (6 credits)	
Foundations of Global Citizenship course	3
Foundations of Society and Human Behavior course	3

Fourth Year, Fall (13 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)		
Finite Element Analysis for Engineering Design	EGM 4350	3 or
Innovative Sensing and Actuation Technologies	EGN 4670C	3 or
Internship	IDS3949	3
Underwater Acoustics****	EOC 4307C	3 or
Ocean Structures****	EOC 4412	3
RI: Ocean Engineering Systems Control and Design Laboratory	EOC 4804L	4
Foundations of Society and Human Behavior course		3
Total		127

^{*} WAC (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.