

Academic Programs – Ocean Engineering Program

The table of courses in the Ocean Engineering Core should be changed to the following. The changes consist of:

1) Course Name Changes:

EOC 3123, EOC 4124, EOC 3306, EOC 4307C, EOC 3410C, EOC 4412, EOC 4201C.

2) Creation of a New Common Course on Vibration Synthesis & Analysis (EGN 4323).

3) Termination of Existing Courses: EOC 3114 (Vibrations).

4) Pre-req changes related to Engineering Math II (MAP 4306), which can be substituted by Computer Applications in ME II (EML 4534).

Ocean Engineering Core		
Introduction to Logic Design	CDA 3201C	4
Circuits 1	EEL 3111	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
Fabrication of OE Systems	EOC 2801	1
Vibration Synthesis & Analysis	EGN 4323	3
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 Engineering Systems Control and Design	EOC 4804	3
Ocean Engineering Systems Control and Design Project	EOC 4804L	4
Ocean Thermal Systems	EOC 4193	3
Ocean Wave Mechanics	EOC 4422	3

Dynamic Systems	EGN4432	3
Ocean and Environmental Data Analysis	EOC 4631C	3
Choose two of the following four courses:		
Ocean Structures	EOC 4412	4
Ship Hydrodynamics	EOC 4124	4
Underwater Acoustics	EOC 4307C	4
Marine Materials & Corrosion	EOC 4201C	4

Non-Engineering Core (grade of "C" or higher required)		
Engineering Math 1	MAP 3305	3
Engineering Math 2 or Computer Applications in ME II	MAP 4306 (or EML 4534)	3
C for Engineers	EEL 2161	3
Engineering Graphics	EGS 1111C	3
Oceanography	OCE 3008	3

Non-Required Electives		
Professional Development	EOC 2902	1
Ocean Engineering Diving	EOC 2131C	1

The sample four-year program of study for BSOE should be changed to the following (the changes are highlighted in red).

First Year, Fall (14 credits)		
College Writing 1	ENC 1101*	3
General Chemistry I	CHM 2045	3
General Chemistry 1 Lab	CHM2045L	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 (10 credits)		
Calculus with Analytic Geometry 3	MAC 2313	4
Engineering Graphics**	EGS 1111C	3
Foundations of Society and Human Behavior 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

Second Year, Spring (13 credits)		
Dynamics	EGN 3321	3
Engineering Thermodynamics	EGN 3343	3
Fabrication of OE Systems	EOC 2801	1
Ocean Engineering Lab	EOC 3130L	3
Strength of Materials	EGN 3331	3

Second Year, Summer (9 credits)		
Circuits 1	EEL 3111	3
Foundations of Global Citizenship course*		3
Foundations of Creative Expressions course		3

Third Year, Fall (15 credits)		
Dynamic Systems	EGN 4432	3

Engineering Math 2 (or Computer Applications in ME II)	MAP 4306 (or EML 4534)	3
Engineering Materials 1	EGN 3365	3
Electro-Mechanical Devices	EGM 4045	3
Foundations of Society and Human Behavior course		3

Third Year, Spring (13 credits)		
Acoustics for Ocean Engineers	EOC 3306	3
Ocean Engineering Fluid Mechanics	EOC 3123	4
Ocean Thermal Systems	EOC 4193	3
Structural Analysis	EOC 3410C	3

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Third Year, Summer (10 credits)		
Introduction to Logic Design	CDA 3201	4
Foundations of Global Citizenship course		3
Foundations of Creative Expressions course*		3

Fourth Year, Fall at SeaTech Campus (13 credits)		
Ocean Systems Control and Design	EOC 4804	3
Vibration Synthesis & Analysis	EGN 4323	3
Ocean and Environmental Data Analysis	EOC 4631C	3
Materials 1 - Marine Topics	EOC 3213	1
Ocean Wave Mechanics	EOC 4422	3

Fourth Year, Spring at SeaTech Campus (12 credits)		
Ocean Engineering Systems Control and Design Project	EOC 4804L	4
Ship Hydrodynamics***	EOC 4124	4
Marine Materials & Corrosion***	EOC 4201C	4
Underwater Acoustics***	EOC 4307C	4

Ocean Structures***	EOC 4412	4
Total		136

* WAC (Gordon Rule) course

** Engineering Graphics should typically be taken at FAU.

*** Choose two courses from these four courses.

Approved by:	
Department Chair: <u>[Signature]</u>	Date: <u>10-8-15</u>
College Curricular Chair: <u>[Signature]</u>	<u>10/02/2015</u>
College Dean: <u>[Signature]</u>	<u>12/06/2015</u>
UUPC Chair: <u>[Signature]</u>	<u>11/12/15</u>
Undergraduate Studies Dean: <u>[Signature]</u>	<u>11/13/15</u>
UFS President: _____	_____
Provost: _____	_____