

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
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First Year, Summer (7 credits)

Course Title	Course Number	Credits
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Calculus with Analytic Geometry 3	MAC 2313	4
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General Education Curriculum Humanities course		3
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Second Year, Fall (13 credits)

Course Title	Course Number	Credits
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Engineering Math 1	MAP 3305	3
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Physics for Engineers 2	PHY 2044	3
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General Physics 2 Lab	PHY 2049L	1
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Statics	EGN 3311	3
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C for Engineers	EEL 2161	3
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Second Year, Spring (15 credits)

Course Title	Course Number	Credits
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Engineering Graphics***	EGN 1111C	3
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Dynamics	EGN 3321	3
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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
<u>General Education Curriculum Humanities course*</u>		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
<u>General Education Curriculum Additional Enrichment course*</u>		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.