

Ocean and Mechanical Engineering

Faculty:

Hashemi, J., Chair; Abtahi, H.; An, E.; Ananthakrishnan, P.; Beaujean, P.P.J.; Cai, G. Q.; Carlsson, L. A.; **Curet, O.**; Case, R. O., Emeritus; Davidson, J. B., Emeritus; Dhanak, M.; Elishakoff, I.; Frisk, G. V.; Gaonkar, G. H.; Ghenai, C.; Glegg, S. A. L.; Granata, R.; Hartley, C. S., Emeritus; Hartt, W. H., Emeritus; Jurewicz, J. T., Emeritus; LeBlanc, L. L., Emeritus; Lin, Y. K., Emeritus; Mahfuz, H.; Masory, O.; McAllister, R. F., Emeritus; Moslemian, D.; Presuel-Moreno, F.; Salivar, G. C.; Schock, S.; Stevens, K. K., Emeritus; Su, T. C.; Tennant, J. S., Emeritus; Tsai, C. T.; vonEllenrieder, K. D.

Ocean Engineering Core		
Introduction to Logic Design	CDA 3201C	4
Circuits 1	EEL 3111	3
Electronics 1	EEL 3300	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
Vibrations	EOC 3114	3
Fluid Mechanics 1	EOC 3123	4
Ocean Engineering Lab	EOC 3130L	3
Materials 1 – Marine Topics	EOC 3213	1
Acoustics 1	EOC 3306	3
Structural Analysis 1	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
Electro-Mechanics, Electrical Machines and Analog Electronics	EOC 3636	3

Dynamic Systems	EGN4432	3
Ocean and Environmental Data Analysis	EOC 4631C	3
Choose two of the following four courses:		
Structural Analysis 2	EOC 4412	4
Fluid Mechanics 2	EOC 4124	4
Acoustics 2	EOC 4307C	4
Engineering Materials 2	EOC 4201C	4

Non-Engineering Core (grade of "C" or higher required)		
Engineering Math 1	MAP 3305	3
Engineering Math 2	MAP 4306	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

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

First Year, Fall (14 credits)		
College Writing 1	ENC 1101*	3
Engineering Chemistry 1	EGN 2095	3
Engineering Chemistry 1 Lab	EGN 2095L	1
Calculus for Engineers 1	MAC 2281	4
Fundamentals of Engineering	EGN 1002	3

First Year, Spring (14 credits)		
College Writing 2	ENC 1102*	3
Oceanography	OCE 3008	3
Physics for Engineers 1	PHY 2043	3
General Physics 1 Lab	PHY 2048L	1
Calculus for Engineers 2	MAC 2282	4

First Year, Summer (10 credits)		
Calculus with Analytic Geometry 3	MAC 2313	4
Engineering Graphics**	EGS 1111C	3
<u>Foundations of Society and Human Behavior course</u>		3

Second Year, Fall (14 credits)		
Engineering Math 1	MAP 3305	3
Physics for Engineers 2	PHY 2044	3
General Physics 2 Lab	PHY 2049L	1
C for Engineers	EEL 2161	3
Introduction to Logic Design	CDA 3201C	4

Second Year, Spring (13 credits)		
Statics	EGN 3311	3
Engineering Thermodynamics	EGN 3343	3
Fabrication of OE Systems	EOC 2801	1

Ocean Engineering Lab	EOC 3130L	3
Engineering Math 2	MAP 4306	3

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

Third Year, Fall (15 credits)		
Dynamics	EGN 3321	3
Strength of Materials	EGN 3331	3
Engineering Materials 1	EGN 3365	3
Acoustics 1	EOC 3306	3
<u>Foundations of Society and Human Behavior course</u>		3

Third Year, Spring (13 credits)		
Vibrations	EOC 3114	3
Fluid Mechanics 1	EOC 3123	4
Ocean Thermal Systems	EOC 4193	3
Structural Analysis 1	EOC 3410C	3

[Top](#)

Third Year, Summer (9 credits)		
Electro-Mechanics, Electrical Machines and Analog Electronics	EOC 3636	3
<u>Foundations of Global Citizenship course</u>		3
<u>Foundations of Creative Expressions course*</u>		3

Fourth Year, Fall at SeaTech Campus (13 credits)		
Ocean Systems Control and Design	EOC 4804	3

Dynamic Systems	EOC 4620	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
Fluid Mechanics 2***	EOC 4124	4
Engineering Materials 2***	EOC 4201C	4
Acoustics 2***	EOC 4307C	4
Structural Analysis 2***	EOC 4412	4
Total		136

* WAC (Gordon Rule) course

** Engineering Graphics should typically be taken at FAU.

*** Choose two courses from these four courses.

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

First Year, Fall (14 credits)		
College Writing 1	ENC 1101*	3
Engineering Chemistry 1	EGN 2095	3
Engineering Chemistry 1 Lab	EGN 2095L	1
Calculus for Engineers 1	MAC 2281	4
Fundamentals of Engineering	EGN 1002	3

First Year, Spring (14 credits)		
College Writing 2	ENC 1102*	3
Oceanography	OCE 3008	3
Physics for Engineers 1	PHY 2043	3
General Physics 1 Lab	PHY 2048L	1
Calculus for Engineers 2	MAC 2282	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 (14 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
Engineering Math 2	MAP 4306	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
Strength of Materials	EGN 3331	3
Engineering Materials 1	EGN 3365	3
Introduction to Logic Design	CDA 3201	4
Foundations of Society and Human Behavior course		3

Third Year, Spring (13 credits)		
Acoustics I	EOC 3306	3
Fluid Mechanics 1	EOC 3123	4
Ocean Thermal Systems	EOC 4193	3
Structural Analysis 1	EOC 3410C	3

[Top](#)

Third Year, Summer (9 credits)		
Electronics 1	EEL 3300	3
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
Vibrations	EOC 3123	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
Fluid Mechanics 2***	EOC 4124	4
Engineering Materials 2***	EOC 4201C	4
Acoustics 2***	EOC 4307C	4
Structural Analysis 2***	EOC 4412	4
Total		136

Approved by:	Date:	<ol style="list-style-type: none"> Syllabus must be attached; syllabus checklist recommended; see guidelines and checklist: www.fau.edu/academic/registrar/UUPCinfo Review Provost Memorandum: Definition of a Credit Hour www.fau.edu/provost/files/Definition_Credit_Hour_Memo_2012.pdf WAC approval (attach if necessary) Gen. Ed. approval (attach if necessary) Consent of affected departments (attach if necessary)
Department Chair: <u>Jared Deen</u>	<u>4-18-13</u>	
College Curriculum Chair: <u>[Signature]</u>	<u>4/18/13</u>	
College Dean: <u>[Signature]</u>	<u>4/19/13</u>	
UUPC Chair: <u>[Signature]</u>	<u>4/19/13</u>	
Undergraduate Studies Dean: <u>[Signature]</u>	<u>4/19/13</u>	
UFS President: _____	_____	
Provost: _____	_____	