Department of Mechanical, Materials Aerospace Engineering
Suggested Program of Study
Mechanical Engineering: Energy Systems 12-13

FIRST YEAR

Fall (12 credit hours, 14 contact hours)		**Spring** (15 credit hours, 19 contact hours)		**Summer** (10 credit hours, 10 contact hours)	
EGN 1006 Intro to the Engr Prof	1(1,2)	**EGN 1007 Engr Concepts & Methods**	1(1,2)	***MAC 2313 Calc. III**	4(4,0)
ENC 1101 English Composition I	3(3,0)	ENC 1102 English Composition II	3(3,0)	EGN 3365 Struct & Prop of Matls.	3(3,0)
*CHS 1440 Chem Engr/CHM 2045 w/lab	4(3,1)	***MAC 2312 Calc. II**	4(4,0)	*(PR: CHS 1440 or CHM 2045 & MAC 2312)*	
***MAC 2311 Calc. I**	4(4,0)	***PHY 2048C Physics for Engineers I w/lab**	4(3,3)	Social Foundations	3(3,0)
		SPC 1608 Oral Communications	3(3,0)		

SECOND YEAR

Fall (13 credit hours, 15 contact hours)		**Spring** (12 credit hours, 12 contact hours)		**Summer** (9 credit hours, 9 contact hours)	
STA 3032 Probability & Statistics	3(3,0)	**EML 3217 Engineering Mechanics - Dynamics**	3(3,0)	ECO 2013 or ECO 2023 Economics I or II	3(3,0)
(PR: MAC 2312)		*(PR: EGN 3310, CR: MAC 2313, MAP 2302)*		Cultural & History Foundations	3(3,0)
***MAP 2302 Differential Equations**	3(3,0)	**EGN 3343 Thermodynamics**	3(3,0)	Cultural & History Foundations	3(3,0)
(PR: MAC 2312)		*(CR: EML 3217, MAP 2302)*			
PHY 2049C Phys for Engr II w/ lab	4(3,3)	**EGM 3601 Solid Mechanics[1]**	3(3,0)		
(PR: MAC 2312, PHY 2048C)		*(PR: EGN 3310, CR: MAP 2302)*			
EGN 3310 Engr Analysis Statics	3(3,0)	**EGN 3373 Principles of Electrical Engr**	3(3,0)		
(PR: PHY 2048C, CR: MAC 2312)		*(PR: PHY 2049C, CR: MAP 2302)*			

THIRD YEAR

Fall (15 credit hours, 17 contact hours)		**Spring** (15 credit hours, 17 contact hours)	
EML 3034C Mod Met in MMAE[1]	3(3,0)	**EML 4225 Introduction to Vibrations & Controls**	3(2,3)
(PR: MAP 2302, CR: EML 3217, EML 3990)		*(PR: EML 3217, EGM 3601, EML 3034C)*	
EML 3701 Fluid Mechanics[1]	3(3,0)	**EML 4142 Heat Transfer**	3(3,0)
(PR: MAP 2302, EML 3217, EGN 3343)		*(PR: EML 3701, EML 3034C)*	
EML 3303C ME Engr Measurements	3(2,3)	**EML 4306C Energy Systems Lab**	3(2,3)
(PR: EGN 3343, CR: EGM 3601)		*(PR: EML 3303C; CR: EML 4142)*	
EML 3101 Mech Sys Thermodynamics	3(3,0)	Approved Technical Elective	3(3,0)
(PR: EGN 3343)		Approved Technical Elective	3(3,0)
EML 3990 Career/Academic Advising I	0(0,0)		
(PR: MAP 2302)			
Science Foundation	3(3,0)		

FOURTH YEAR

Fall (12 credit hours, 16 contact hours)		**Spring** (15 credit hours, 21 contact hours)	
EML 4143 Heat Transfer II	3(3,0)	**EML 4502C Engineering Design II**	3(1,6)
(PR: EML 4142)		*(PR: EML 4501C, EML 4991)*	
EML 4703 Fluids II	3(3,0)	Approved Technical Elective	3(3,0)
(PR: EML 3701)		Approved Technical Elective	3(3,0)
EML 4501C Engineering Design I	3(1,6)	Approved Technical Elective	3(3,0)
(PR: EML 3303C, EML 3701, EML 4142; CR: EML 4991)		Cultural & History Foundations	3(3,0)
EML 4991 Career/Academic Advising II	0(0,0)		
(PR: EML 3990)			
Approved Technical Elective	3(3,0)		

IMPORTANT NOTICE :

* Grade of C or better is required in these courses.

[1] Grade of C or better is required in Calculus MAC 2311, MAC 2312, MAC 2313, Physics PHY 2048C, and CHS 1440/ CHM 2045C

Bolded course should be taken in the term noted or in a previous term if your schedule permits and as long as all prerequisites for that course have been met.

Non-bolded course may be taken at any time as long as all prerequisites for that course have been met. Caution must be taken to insure that you take courses in a proper sequence regarding prerequisites.

Please meet with your advisor if you have any questions regarding your schedule. Do not drop any course before discussing this action with your advisor - there may be alternative actions, which will benefit you.

If you are not ready to begin the Calculus sequence upon entry to the Mechanical Engineering curriculum it is imperative that you meet with your advisor to plan a personalized program of study. Mathematics and physics are cornerstones of a quality engineering program and it is important for your academic career that you proceed accordingly.

Revised: 3/8/2012