Department of Mechanical, Materials Aerospace Engineering
Suggested Program of Study
Mechanical Engineering **11 - 12**

FIRST YEAR

Fall (15 credit hours, 17 contact hours)		**Spring** (15 credit hours, 19 contact hours)		**Summer** (10 credit hours, 10 contact hours)	
EGN 1006 Introduction to Engr Prof	1(1,2)	**EGN 1007 Engineering. 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)	Social Foundations	3(3,0)
*CHS 1440 Chemistry for Engs or CHM 2045 w/lab	4(3,1)	***MAC 2312 Calc. II**	4(4,0)	Cultural & History Foundations	3(3,0)
***MAC 2311 Calc. I**	4(4,0)	***PHY 2048 Physics for Engineers I w/lab**	4(3,3)		
ECO 2013 Econ I (pref) or ECO 2023 Econ II	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 redit hours, 9 contact hours)	
EGN 3310 Engr Analysis Statics	3(3,0)	**EGN 3321 Engineering Analysis Dynamics**	3(3,0)	EGN 3365 Struct & Prop of Materials	3(3,0)
(PR: PHY 2048, CR: MAC 2312)		*(PR: EGN 3310, CR: MAC 2313)*		*(PR: CHS 1440 or CHM 2045 & MAC 2312)*	
***MAP 2302 Differential Equations**	3(3,0)	**EGN 3343 Thermodynamics**	3(3,0)	Cultural & History Foundations	3(3,0)
(PR: MAC 2313)		*(CR: EGN 3321, MAP 2302)*		Cultural & History Foundations	3(3,0)
PHY 2049 Physics for Engr II w/Lab	4(3,3)	**EGM 3601 Solid Mechanics**	3(3,0)		
(PR: MAC 2312, PHY 2048)		*(PR: EGN 3310, CR: MAP 2302)*			
STA 3032 Probability/Statistics	3(3,0)	**EGN 3373 Principles of Electrical Engr**	3(3,0)		
(PR: MAC 2312)		*(PR: PHY 2049; CR: MAP 2302)*			

THIRD YEAR

Fall (15 credit hours, 17 contact hours)		**Spring** (12 credit hours, 14 contact hours)	
EML 3701 Fluids Mechanics I[1]	3(3,0)	**EML 4220 Vibration Analysis**	3(3,0)
(PR: MAP 2302, EGN 3321, EGN 3343)		*(PR: EGN 3321, EML 3034C, EGM 3601)*	
EML 3500 Machine Design	3(3,0)	**EML 4142 Heat Transfer**	3(3,0)
(PR: EGM 3601)		*(PR: EML 3701, EML 3034C)*	
EML 3034C Modeling Methods in MMAE[1]	3(3,0)	**EML 4535C CAD/CAM**	3(2,3)
(PR: MAP 2302, CR: EGN 3321, EML 3990)		*(PR: EGM 3601, EML 3034C; CR:EAS 4200 /EML3500)*	
EML 3303C Mechanical Engineering Measurements I	3(2,3)	Approved Technical Elective	3(3,0)
(PR: EGN 3343; CR: EGM 3601)			
Science Foundation	3(3,0)		
EML 3990 ME Career/Acad Fac. Adv. I	0(0,0)		
(PR: MAP 2302, CR: EML 3034C)			

FOURTH YEAR ENERGY SYSTEMS OPTION

Fall (14 credit hours, 21 contact hours)		**Spring** (13 credit hours, 19 contact hours)	
EML 3101 Mechanical Systems Thermodynamics[1]	3(3,0)	**EML 4304C Design of Thermo-Fluids**	2(1,3)
(PR: EGN 3343)		*(PR: 3303C; CR: EML 4142, EML 4220)*	
EML 4501C Engineering Design I	3(1,6)	EML 4502C Engineering Design II	3(1,6)
(PR: EML 3303C, EML 3500, EML 3701, CR: EML 4312C, EML 4991)		*(PR: EML 4501C, EML 4991)*	
EML 4703C Fluids II	3(3,0)	**EML 4145 Topics in Heat Transfer**	2(2,0)
(PR: EML 3701)		*(CR: EML 4142)*	
EML 4312C Feedback Control	3(2,3)	Approved Technical Elective	3(3,0)
(PR: EGN 3373, EML4220, MAP 2302)		Approved Technical Elective	3(3,0)
EML 4221L Mechanical Systems Experimental Tech	2(1,2)		
(PR: EML 3303C, CR: EML 4220)			
EML 4991 ME Career/Acad Fac. Adv. II	0(0,0)		
(PR: EML 3990, CR: EML 4501C)			

FOURTH YEAR MECHANICAL SYSTEMS OPTION

Fall (14 credit hours, 21 contact hours)		**Spring** (13 credit hours, 20 contact hours)	
EML 4501C Engineering Design I	3(1,6)	**EML 4304C Design of Thermo-Fluids**	2(1,3)
(PR: EML 3303C, EML 3500, EML 3701, CR: EML 4312C, EML 4991)		*(PR: 3303C; CR: EML 4142, EML 4220)*	
EML 3262 Kinematics of Mechanisms[1]	3(3,0)	EML 4502C Engineering Design II	3(1,6)
(PR: EGN 3321)		*(PR: EML 4501C, EML 4991)*	
EML 4312C Feedback Control	3(2,3)	EGM 3601L Solid Mechanics Lab	2(0,3)
(PR: EGN 3373, EML4220, MAP 2302)		*(PR: EML 3601)*	
EML 4221L Mechanical Systems Experimental Tech	2(1,2)	Approved Technical Elective	3(3,0)
(PR: EML 3303C, CR: EML 4220)		Approved Technical Elective	3(3,0)
Approved Technical Elective	3(3,0)		
EML 4991 ME Career/Acad Fac. Adv. II	0(0,0)		
(PR: EML 3990, CR: EML 4501C)			

FOURTH YEAR MATERIALS SYSTEMS OPTION

Fall (15 credit hours, 21 contact hours)		**Spring** (12 credit hours, 17 contact hours)	
EMA 4102 Thermodyn & Kinetics of Materials[1]	3(3,0)	**EMA 3012C Experimental Tech in ME & Matls.**	3(2,2)
(PR: EGN 3343, EGN 3365)		*(PR: EGN 3365, EGM 3601)*	
EML 4501C Engineering Design I	3(1,6)	EML 4502C Engineering Design II	3(1,6)
(PR: EML 3303C, EML 3500, EML 3701, CR: EML 4312C, EML 4991)		*(PR: EML 4501C, EML 4991)*	
EMA 3124 Design and Select of Materials	3(3,0)	**EMA 4223 Fund. of Mech. Behavior of Matls.**	3(3,0)
(PR: EGN 3365, EGM 3601)		*(PR: EGN 3365, EGM 3601)*	
EML 4312C Feedback Control	3(2,3)	Approved Technical Elective	3(3,0)
(PR: EGN 3373, EML4220, MAP 2302)			
Approved Technical Elective	3(3,0)		
EML 4991 ME Career/Acad Fac. Adv. II	0(0,0)		
(PR: EML 3990, CR: EML 4501C)			

IMPORTANT NOTICE :

***** Grade of C or better is required.

[1] Grade of C or better is required in MAC 2311, MAC 2312, MAC 2312 and PHY 2048C

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