

Department of Mechanical Aerospace Engineering
Suggested Program of Study
Mechanical Engineering: 2016 - 2017

FIRST YEAR

Fall (12 credit hours, 14 contact hours)		Spring (15 credit hours, 19 contact hours)		Summer (10 credit hours, 10 contact hours)	
EGS 1006C Intro to the Engr Prof	1(1,2)	EGN 1007C Engr Concepts & Methods	1(1,2)	*MAC 2313 Calculus III w/ Analytic Geometry	4(4,0)
ENC 1101 English Composition I - A1	3(3,0)	ENC 1102 English Composition II - A2	3(3,0)	<i>(PR: "C" (2.0) or better in MAC 2312)</i>	
*CHS 1440 Principles of Chemistry	4(3,1)	SPC 1608 Oral Communications - A3	3(3,0)	EGN 3365 Structure & Properties of Materials	3(3,0)
*MAC 2311C Calculus I w/ Analytic Geometry - C1	4(4,0)	*MAC 2312 Calculus II w/ Analytic Geometry	4(4,0)	<i>(PR: "C" (2.0) or better in CHS 1440, MAC 2312)</i>	
<i>(PR: "C" (2.0) or better in MAC 1114C, MAC 1140C)</i>		<i>(PR: "C" (2.0) or better in MAC 2311C)</i>		Historical & Cultural Foundation - B1	3(3,0)
		*PHY 2048C General Physics I using Calculus - E1	4(3,3)		
		<i>(PR: "C" (2.0) or better in MAC 2311C)</i>			

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 for Engineers - C2	3(3,0)	*EGN 3321 Engineering Analysis - Dynamics	3(3,0)	Social Foundations - D1	3(3,0)
<i>(PR: "C" (2.0) or better in MAC 2312)</i>		<i>(PR: "C" (2.0) or better in EGN 3310, MAC 2313, CR: MAP 2302)</i>		Historical & Cultural Foundation - B2	3(3,0)
*MAP 2302 Differential Equations	3(3,0)	*EGN 3343 Thermodynamics	3(3,0)	Historical & Cultural Foundation - B3	3(3,0)
<i>(PR: "C" (2.0) or better in MAC 2313)</i>		<i>(CR: EGN 3321, MAP 2302)</i>			
PHY 2049C General Physics II using Calculus	4(3,3)	EGM 3601 Solid Mechanics	3(3,0)		
<i>(PR: "C" (2.0) or better in MAC 2312, PHY 2048C)</i>		<i>(PR: "C" (2.0) or better in EGN 3310, CR: MAP 2302)</i>			
*EGN 3310 Engineering Analysis - Statics	3(3,0)	EGN 3373 Principles of Electrical Engr	3(3,0)		
<i>(PR: "C" (2.0) or better in MAC 2311C, PHY 2048C, CR: MAC 2312)</i>		<i>(PR: PHY 2049C, CR: MAP 2302)</i>			

THIRD YEAR

Fall (15 credit hours, 18 contact hours)		Spring (15 credit hours, 17 contact hours)	
EML 3034C Modeling Methods in MAE	3(3,1)	EML 4225 Introduction to Vibrations & Controls	3(3,0)
<i>(PR: "C" (2.0) or better in MAP 2302, CR: EGN 3321, EML 3930)</i>		<i>(PR: EGN 3321, EGM 3601, EML 3034C, EGN 3373)</i>	
EML 3933 Career/Academic Advising I	0(0,0)	EML 4142 Heat Transfer	3(3,0)
<i>(PR: "C" (2.0) or better in MAP 2302)</i>		<i>(PR: EML 3701, EML 3034C)</i>	
EML 3701 Fluid Mechanics	3(3,0)	Laboratory Course (Choose 1 of 2)	3(2,3)
<i>(PR: "C" (2.0) or better in MAP 2302, EGN 3321, EGN 3343)</i>		<i>(See List Below)</i>	
EML 3303C ME Engr Measurements	3(2,3)	Approved Technical Elective	3(3,0)
<i>(PR: EGN 3343, CR: EGM 3601)</i>		Social Foundations - D2	3(3,0)
EML 3500 Design and Analysis of Machine Components	3(3,0)		
<i>(PR: EGM 3601)</i>			
Science Foundations - E2	3(3,0)		

FOURTH YEAR

Fall (15 credit hours, 19 contact hours)		Spring (12 credit hours, 16 contact hours)	
EML 4501C Engineering Design I	3(1,6)	EML 4502C Engineering Design II	3(1,6)
<i>(PR: EGN 3373, EML 3303C, EML 3701, EML 4142, EML 4225)</i>		<i>(PR: EML 4501C, EML 4931)</i>	
<i>(CR: EML 4931, Department Consent)</i>		Approved Technical Elective	3(3,0)
EML 4931 Career/Academic Advising II	0(0,0)	Approved Technical Elective	3(3,0)
<i>(PR: EML 3933, Department Consent)</i>		Option Course (Choose 1 of 5)	3(3,0)
Approved Technical Elective	3(3,0)	<i>(See List Below)</i>	
Approved Technical Elective	3(3,0)		
Approved Technical Elective	3(3,0)		
Option Course (Choose 1 of 5)	3(3,0)		
<i>(See List Below)</i>			

IMPORTANT NOTICES:

* A Grade of "C" (2.0) or better is required in these courses - CHS 1440, MAC 2311C, MAC 2312, MAC 2313, MAP 2302, EGN 3310, EGN 3321, and EGN 3343

Courses should be taken in the term noted, please meet with your Academic Advisor if you have any questions regarding your schedule. Do not withdraw from any course before discussing this action with your advisor - there may be alternate actions, which could benefit you.

If you are not ready to begin the Calculus sequence upon entry to the Aerospace 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.

Please note, the College of Engineering and Computer Science has implemented a "Lack of Progress" Policy: Students may not accumulate seven (7) or more unsuccessful attempts (i.e. grades below "C" (2.0) or withdrawals) over all courses taken at UCF or more than two (2) unsuccessful attempts of the same course taken at UCF or they will be placed on Lack of Progress Probation for as long as the student is enrolled in a CECS or COP major. If a student on Lack of Progress Probation has a tenth unsuccessful attempt over all courses taken at UCF or has a third unsuccessful attempt of the same course taken at UCF, the student will be excluded from all CECS or COP majors.

ALL Mechanical Students Will Select 2 of 5 Courses (6 Credit Hours) :					
EML 4143: Heat Transfer II	3(3,0)	OR	EML 3101: Thermodynamics of Mechanical Systems	3(3,0)	OR
<i>(PR: EML 4142) Fall Only</i>			<i>(PR: EGN 3343) Spring Only</i>		
EML 4313 Intermediate System Dynamics & Controls	3(3,0)	OR	EML 4504: Design and Analysis of Machine Components II	3(3,0)	
<i>(PR: EGN 3321, EML 4225) Fall Only</i>			<i>(PR: EML 3500) Spring Only</i>		
EML 4703: Fluid Mechanics II	3(3,0)	OR			
<i>(PR: EML 3701) Fall Only</i>					

ALL Mechanical Students Will Select 1 of 2 Laboratory Courses (3 Credit Hours) :					
EML 4301C Mechanical Systems Lab	3(2,3)	OR	EML 4306C Energy Systems Lab	3(2,3)	
<i>(PR: EML 3303C, EGM 3601; CR: EML 4225) Spring Only</i>			<i>(PR: EML 3303C; CR: EML 4142) Spring Only</i>		