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

FIRST YEAR

Fall (12 credit hours, 14 contact hours)
EGS 1006C Intro to the Engr Prof 1(1,2)
ENC 1101 English Composition I - A1 3(3,0)
*CHS 1440 Principles of Chemistry 4(3,1)
*MAC 2311C Calculus I w/ Analytic Geometry - C1 4(4,0)
(PR: "C" (2.0) or better in MAC 1140C)

Spring (15 credit hours, 19 contact hours)
EGN 1007C Engr Concepts & Methods 1(1,2)
ENC 1102 English Composition II - A2 3(3,0)
SPC 1608 Oral Communications - A3 3(3,0)
*MPC 2312 Calculus II w/ Analytic Geometry 4(4,0)
(PR: "C" (2.0) or better in MAC 2311C)
*PHY 2048C General Physics I using Calculus - E1 4(3,3)

SECOND YEAR

Fall (13 credit hours, 15 contact hours)
STA 3032 Probability & Statistics for Engineers - C2 3(3,0)
(PR: "C" (2.0) or better in MAC 2312)
*MAP 2302 Differential Equations 3(3,0)
(PR: "C" (2.0) or better in MAC 2312)
PHY 2046C General Physics II using Calculus 4(3,3)
(PR: "C" (2.0) or better in MAC 2312, PHY 2048C)
*EGN 3310 Engineering Analysis - Statics 3(3,0)
(PR: "C" (2.0) or better in MAC 2311C, PHY 2048C, CR: MAC 2312)

Spring (12 credit hours, 12 contact hours)
*EGN 3321 Engineering Analysis - Dynamics 3(3,0)
(PR: "C" (2.0) or better in EGN 3310, MAC 2313, CR: MAP 2302)
*EGN 3343 Thermodynamics 3(3,0)
(PR: EGN 3321, MAP 2302)
EGM 3601 Solid Mechanics 3(3,0)
(PR: "C" (2.0) or better in EGN 3310, CR: MAP 2302)
EGN 3373 Principles of Electrical Engr 3(3,0)
(PR: PHY 2049C, CR: MAP 2302)

THIRD YEAR

Fall (15 credit hours, 18 contact hours)
EML 3034C Modeling Methods in MAE 3(3,1)
(PR: "C" (2.0) or better in MAP 2302, CR: EGN 3321, EML 3930)
EML 3933 Career/Academic Advising I 0(0,0)
(PR: "C" (2.0) or better in MAP 2302)
EML 3701 Fluid Mechanics 3(0,0)
(PR: "C" (2.0) or better in MAP 2302, EGN 3321, EGN 3343)
EML 3303C ME Engr Measurements 3(2,3)
(PR: EGN 3343, CR: EGM 3601)
EML 3500 Design and Analysis of Machine Components 3(3,0)
(PR: EGM 3601)
Science Foundations - E2 3(0,0)

Spring (15 credit hours, 17 contact hours)
EML 4225 Introduction to Vibrations & Controls 3(3,0)
(PR: EGN 3321, EML 3910, EML 3034C)
EML 4142 Heat Transfer 3(3,0)
(PR: EML 3701, EML 3034C)
Laboratory Course (Choose 1 of 2) 3(2,3)
(See List Below)
Approved Technical Elective 3(3,0)
Social Foundations - D2 3(3,0)

FOURTH YEAR

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

Spring (12 credit hours, 16 contact hours)
EML 4502C Engineering Design II 3(1,6)
(PR: EML 4501C, EML 4931)
Approved Technical Elective 3(3,0)
Approved Technical Elective 3(3,0)
Option Course (Choose 1 of 5) 3(3,0)
(See List Below)

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
into 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 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 4142: Heat Transfer II 3(3,0) OR EML 3101: Thermodynamics of Mechanical Systems 3(3,0)
(PR: EML 4142)

EML 4313 Intermediate System Dynamics & Controls 3(3,0) OR EML 4504: Design and Analysis of Machine Components II 3(3,0)
(PR: EGN 3310, Spring Only)

EML 4703: Fluid Mechanics II 3(3,0) OR EML 4313 Intermediate System Dynamics & Controls 3(3,0)
(PR: EML 3701, Fall Only)

ALL Mechanical Students Will Select 1 of 2 Laboratory Courses (3 Credit Hours):

EML 4301C Mechanical Systems Lab 3(2,3) OR EML 4308C Energy Systems Lab 3(2,3)
(PR: EML 3303C, CR: EML 4142, Spring Only)