Suggested Program of Study

Department of Mechanical Aerospace Engineering

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 3(3,0)
- *CHS 1440 Principles of Chem/CHM 2045 w/lab 4(3,1)
- *MAC 2311C Calc. I 4(4,0)

Spring (15 credit hours, 19 contact hours)
- EGN 1007C Engn Concepts & Methods 1(1,2)
- ENC 1102 English Composition II 3(3,0)
- *MAC 2312 Calc. II 4(4,0)
- *PHY 2048C Physics for Engineers I w/lab 4(3,3)
- SPC 1608 Oral Communications 3(3,0)

Summer (10 credit hours, 10 contact hours)
- *MAC 2313 Calc. III 4(4,0)
- EGN 3365 Struct & Prop of Mats. 3(3,0)
- Social Foundations 3(3,0)

SECOND YEAR

Fall (13 credit hours, 15 contact hours)
- STA 3032 Probability & Statistics 3(3,0)
- *MAP 2302 Differential Equations 3(3,0)
- PHY 2049C Phys for Engr II wlab 4(3,3)
- *EGN 3310 Engr Analysis Statics 3(3,0)

Spring (12 credit hours, 12 contact hours)
- *EGM 3601 Solid Mechanics¹ 3(3,0)
- EML 4301C Energy Systems Lab (PR: EML 3303C, EGM 3601; CR: EML 4225)
- EML 4143 Heat Transfer II (PR: EML 3500)
- EML 4310 Intermediate System Dynamics & Controls (PR: EGN 3321, EML 4250)
- Laboratory Course (Choose 1 of 2) (See List Below)

Summer (9 credit hours, 9 contact hours)
- ECO 2013 or ECO 2023 Economics 3(3,0)
- Cultural & History Foundations 3(3,0)
- Cultural & History Foundations 3(3,0)

THIRD YEAR

Fall (15 credit hours, 17 contact hours)
- EML 3034C Mod Met in MAE* 3(3,0)
- EML 3990 Career/Academic Advising I 3(3,0)
- EML 3701 Fluid Mechanics¹ 3(3,0)
- EML 3303C ME Engr Measurements (PR: EGN 3343, CR: EGM 3601) 3(3,0)
- EML 3500 Machine Design (PR: EGN 3343, CR: EGM 3601) 3(3,0)
- Science Foundation 3(3,0)

Spring (15 credit hours, 17 contact hours)
- EML 4225 Introduction to Vibrations & Controls 3(2,3)
- EML 4142 Heat Transfer (PR: EML 3701, EML 3034C) 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) (See List Below)
- Option Course (Choose 1 of 5) (See List Below)

FOURTH YEAR

Fall (15 credit hours, 19 contact hours)
- EML 4501C Engineering Design I (PR: EGN 3373, EML 3303C, EML 3701, EML 4142, EML 4225, CR: EML 4931) 3(1,6)
- EML 4501 Intermediate System Dynamics & Controls (PR: EGN 3321, EML 4250) 3(3,0)
- Approved Technical Elective 3(3,0)
- Approved Technical Elective 3(3,0)
- Option Course (Choose 1 of 5) (See List Below)
- Option Course (Choose 1 of 5) (See List Below)

Spring (12 credit hours, 16 contact hours)
- EML 4502C Engineering Design II (PR: EML 4501C, EML 4931) 3(1,8)
- Laboratory Course (Choose 1 of 2) (See List Below)

IMPORTANT NOTICES:
* Grade of C or better is required in these courses.
¹ Grade of C or better is required in MAC 2311, MAC 2312, MAC 2313 and PHY 2048C

Bolded Courses should be taken in the term noted 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 ensure 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 options.

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.

ALL Mechanical Students Will Select 2 of 5 Courses (6 Credit Hours):
- EML 3101: Thermodynamics of Mechanical Systems (PR: EGN 3343) Spring Only
- EML 4504: Design & Analysis of Machine Components II (PR: EML 3500) Spring Only
- EML 4143: Heat Transfer II (PR: EML 4142) Fall Only
- EML 4311 Intermediate System Dynamics & Controls (PR: EGN 3321, EML 4250) Fall Only
- EML 4703: Fluids Mechanics II (PR: EML 3701) Fall Only

ALL Mechanical Students Will Select 1 of 2 Laboratory Courses (3 Credit Hours):
- EML 4301C Mechanical Systems Lab (PR: EML 3303C, EGM 3601; CR: EML 4225) Spring Only

Revised: 4/8/2016