# Department of Mechanical and Aerospace Engineering
## Suggested Program of Study
## Aerospace Engineering 16-17

### 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) | **EGS 1007C 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) | EMA 3706 Struct & Prop of AE Matls. | 3(3,0) |
| *CHS 1440 Principles of Chem/CHM 2045 w/lab | 4(3,1) | ***MAC 2312 Calc. II** | 4(4,0) | *(PR: CHS 1440 or CHM 2045 & MAC 2312)* | |
| ***MAC 2311C 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) | ***EGN 3321 Engineering Analysis-Dynamics** | 3(3,0) | ECO 2013 or ECO 2023 Economics | 3(3,0) |
| *(PR: MAC 2312)* | | *(PR: EGN 3310, MAC 2313, CR: 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 2313)* | | *(CR: EGN 3321, 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 : MAC 2311C, PHY 2048C, CR: MAC 2312)* | | *(PR: PHY 2049C, CR: MAP 2302)* | | | |

### THIRD YEAR

| **Fall** (15 credit hours, 17 contact hours) | | **Spring** (15 credit hours, 16 contact hours) | |
|---|---|---|---|
| **EML 3034C Mod Met in MAE[1]** | 3(3,0) | **EAS 3101 Fundamentals of Aerodynamics** | 3(3,0) |
| *(PR: MAP 2302, CR: EGN 3321, EAS 3933)* | | *(PR: EML 3701)* | |
| **EML 3701 Fluid Mechanics[1]** | 3(3,0) | **EAS 3810C Design of Aerospace Experiments** | 3(1,3) |
| *(PR: MAP 2302, EGN 3321, EGN 3343)* | | *(PR: EAS 3800C, EML 3701)* | |
| **EAS 3800C AE Engr Measurements** | 3(2,3) | EML 4142 Heat Transfer | 3(3,0) |
| *(PR: EGN 3343, CR: EGM 3601)* | | *(PR: EML 3701, EML 3034C)* | |
| **EAS 4200 Analysis & Design of Aerospace Structures** | 3(3,0) | EML 4225 Introduction to Vibrations & Controls | 3(3,0) |
| *(PR: EGM 3601)* | | *(PR: EGN 3321, EGM 3601, EML 3034C, EGN 3373)* | |
| EAS 3933 Career/Academic Advising I | 0(0,0) | Cultural & History Foundations | 3(3,0) |
| *(PR: MAP 2302 )* | | | |
| Science Foundation | 3(3,0) | | |

### FOURTH YEAR

| **Fall** (15 credit hours, 19 contact hours) | | **Spring** (12 credit hours, 16 contact hours) | |
|---|---|---|---|
| **EAS 4105 Flight Mechanics** | 3(3,0) | **EAS 4300 Propulsion Systems** | 3(3,0) |
| *(PR: EAS 3101, CR: EML 4225)* | | *(PR: EAS 4134)* | |
| **EAS 4134 High Speed Aerodynamics** | 3(3,0) | **EAS 4710C Aerospace Design II** | 3(1,6) |
| *(PR: EAS 3101)* | | *(PR: EAS 4700C, EAS 4931)* | |
| **EAS 4700C Aerospace Design I** | 3(1,6) | Approved Technical Elective | 3(3,0) |
| *(PR: EGN 3373, EAS 3800C, EML 3701, EML 4142, EML 4225; CR: EAS 4931)* | | Approved Technical Elective | 3(3,0) |
| EAS 4931 Career/Academic Advising II | 0(0,0) | | |
| *(PR: EAS 3990, Department Approval)* | | | |
| Approved Technical Elective | 3(3,0) | | |
| 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 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 actions, which will 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.

*Revised: 4/8/2016*