Department of Mechanical and Aerospace Engineering  
Suggested Program of Study  
Aerospace Engineering: 2018 - 2019

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<th>FIRST YEAR</th>
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<tr>
<td><strong>Fall</strong> (12 credit hours, 14 contact hours)</td>
<td><strong>Spring</strong> (15 credit hours, 19 contact hours)</td>
<td><strong>Summer</strong> (10 credit hours, 11 contact hours)</td>
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| ENC 1101 English Composition I – GEP 1 | EAS 4105 Flight Mechanics | *EAS 2311 Calc. III w/ Analytic Geometry 4(4,0)  
(PR: "C" (2.0) or better in MAC 2311C) |
| *EGB 1000C Intro to the Engr Prof 1(1,2) | *SPC 1608 Oral Communications – GEP 3 3(3,0)  
(PR: "C" (2.0) or better in MAC 2311C) | *EML 3101 Engr Analysis Statics 3(3,0) |
| *MAC 2311C Calc. I w/ Analytic Geometry – GEP 7 4(4,0) | *EAS 1007C Engr Concepts & Methods 1(1,2)  
(PR: "C" (2.0) or better in MAC 2311C) |  
*EML 3701 Fluid Mechanics 3(3,0)  
(PR: "C" (2.0) or better in MAC 2311C) |
| Pick One - *CHM 1440 or Principals of Chemistry or 4(3,1) | *MAC 2312 Calculus II w/ Analytic Geometry 4(4,0)  
(PR: "C" (2.0) or better in MAC 2311C) | *COP 3223C Intro to Programming with C 3(3,1) |
|  *CHM 2045C Chemistry Fundamentals I – GEP 11 4(3,1) |  **PHY 2048C** General Physics Using Calc I – GEP 11 4(3,3)  
**(PR: "C" (2.0) or better in MAC 2311C)** |  |

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<th>SECOND YEAR</th>
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<td><strong>Fall</strong> (13 credit hours, 15 contact hours)</td>
<td><strong>Spring</strong> (12 credit hours, 12 contact hours)</td>
<td><strong>Summer</strong> (9 credit hours, 9 contact hours)</td>
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<tr>
<td>*EGB 3321 Engineering Analysis - Dynamics 3(3,0)</td>
<td>*EGB 3373 Principles of Electrical Engr 3(3,0)</td>
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*STA 3032 Prob. & Statistics for Engineers GEP 8 3(3,0)  
(PR: "C" (2.0) or better in MAC 2312) |
| *MAP 2302 Differential Equations 3(3,0) | *EGB 3343 Thermodynamics 3(3,0)  
(PR: "C" (2.0) or better in MAC 2313, MAC 3310) | Cultural Foundation – GEP 5 3(3,0) |
| *EAS 2049C General Physics Using Calculus II 4(3,3) | *EAS 3601 Solid Mechanics 3(3,0)  
**(PR: "C" (2.0) or better in MAC 2312, PHY 2048C)** | Social Foundation – GEP 9 3(3,0) |
| *EAS 3706 Struct & Prop of Aerospace Matls. 3(3,0)  
**(PR: "C" (2.0) or better in CHS 1440 or CHM 2045C, MAC 2312)** | Historical Foundation – GEP 4 3(3,0) |  |

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<th>THIRD YEAR</th>
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<td><strong>Fall</strong> (15 credit hours, 18 contact hours)</td>
<td><strong>Spring</strong> (15 credit hours, 16 contact hours)</td>
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| EAS 3933 Career/Academic Advising I 0(0,0) | *EML 4142 Heat Transfer 3(3,0)  
**(PR: "C" (2.0) or better in EML 3701, EML 3034C)** |  |
| *EGB 3034C Modeling Methods in MAE 3(3,1) | *EML 4225 Introduction to Vibrations & Controls 3(3,0)  
**(PR: "C" (2.0) or better in EGB 3321, GEB 3361, EML 3034C, EMB 3373)** |  |
|  *EML 3701 Fluid Mechanics 3(3,0)  
**(PR: "C" (2.0) or better in MAC 2311C, MAC 2312, MAC 2313, MAP 2302, PHY 2048C, CR: EGN 3321 and EAS 3903)** | *EAS 3810C Design of Aerospace Experiments 3(1,3)  
**(PR: "C" (2.0) or better in EAS 3360C, EML 3430)** |  |
| *EAS 3800C Aerospace Engr Measurements 3(2,3)  
**(PR: "C" (2.0) or better in EMB 3343)** | *EAS 3101 Fundamentals of Aerodynamics 3(3,0)  
**(PR: "C" (2.0) or better in EML 3701) Spring Only** |  |
| *EAS 4200 Analysis & Design of Aerospace Structures 3(3,0)  
**(PR: "C" (2.0) or better in EMB 3401) Fall Only** | Social Foundation – GEP 10 3(3,0) |  |
| Life Sciences Foundation – GEP 12 3(3,0) |  |  |

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<th>FOURTH YEAR</th>
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| EAS 4930 Career/Academic Advising II 0(0,0) | *EAS 4300 Aerothermodynamics of Propulsion Syst. 3(3,0)  
**(PR: "C" (2.0) or better in EAS 4134 or EML 4703) Spring Only** |  |
| *EAS 4700C Aerospace Design I 3(2,4)  
**(PR: "C" (2.0) or better in EGB 3373, EAS 3800C, ELM 3701, EML 4142, EML 4225 and Department Consent, CR: EAS 4931)** | *EAS 4710C Aerospace Design II 3(2,4)  
**(PR: EAS 3931 and "C" (2.0) or better in EAS 4700C)** |  |
|  *EAS 4105 Flight Mechanics 3(3,0)  
(EAS 3101, CR: EML 4225) Fall Only* | *Approved Technical Elective 3(3,0)  
*Approved Technical Elective 3(3,0) |  |
| *EAS 4134 High-Speed Aerodynamics 3(3,0)  
**(PR: "C" (2.0) or better in EAS 3103) Fall Only** |  |  |
| Cultural Or Historical Foundation – GEP 6 3(3,0) |  |  |

**IMPORTANT NOTICES:**

*Grade of "C" (2.0) or better is required in these courses.

Courses should be taken in the noted term or in a previous term, if your schedule permits, and as long as all prerequisites for that course have been met. 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 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: 3/14/2018