

Aerospace Engineering Curriculum

<p><u>Semester 1</u></p> <p>(1) ME 102: Mech & Aero Engr Orientation</p> <p>(3) MATH 191: Calculus & Analytic Geometry I</p> <p>(4) CHEM 111: General Chemistry I</p> <p>(2) MAE 159: Graphical Communication & Design</p> <p>(4) ENGL 111G: Rhetoric and Composition</p> <p>14 credit hours</p>	<p><u>Semester 2</u></p> <p>(2) ME 166: Intro. to Mech & Aero Engr</p> <p>(3) MATH 192: Calculus & Analytic Geometry II</p> <p>(4) CHEM 112: General Chemistry II</p> <p>(3) ENGL 218G: Technical & Scientific Comm.</p> <p>(3) ME 222: Intro to Product Development/Laboratory</p> <p>(3) Approved Gen. Ed. Lit. & Fine Arts elective</p> <p>18 credit hours</p>
Total credit hours for Freshman Year: 32	
<p><u>Semester 3</u></p> <p>(3) ME 260: Engineering Problem Solving</p> <p>(3) MATH 291: Calculus & Analytic Geometry III</p> <p>(3) PHYS 215: Engr Physics I</p> <p>(3) ME 236: Engr Mechanics I</p> <p>(3) EE 201: Networks</p> <p>(3) COMM 265G: Principles of Human Comm.</p> <p>18 credit hours</p>	<p><u>Semester 4</u></p> <p>(3) PHYS 216: Engr Physics II</p> <p>(3) MATH 392: Differential Equations</p> <p>(3) ME 237: Engr Mechanics II</p> <p>(3) ME 240: Thermodynamics</p> <p>(3) CE301: Mechanics of Materials</p> <p>15 credit hours</p>
Total credit hours for Sophomore Year: 33	
<p><u>Semester 5</u></p> <p>(3) AE 339: Aerodynamics I</p> <p>(3) AE 363: Aerospace Structures</p> <p>(3) Human Thought & Behavior Elective</p> <p>(3) ME 328: Engr Analysis I</p> <p>(3) ECON 251 or 252G: Macro- or Micro-economics</p> <p>(3) CHE 361: Materials</p> <p>18 credit hours</p>	<p><u>Semester 6</u></p> <p>(3) AE 439: Aerodynamics II</p> <p>(3) AE 362: Orbital Mechanics & Space Environment</p> <p>(3) AE 364: Flight Dynamics & Controls</p> <p>(3) ME 341: Heat Transfer</p> <p>(3) ME 345: Experimental Methods I</p> <p>15 credit hours</p>
Total credit hours for Junior Year: 33	
<p><u>Semester 7</u></p> <p>(3) AE 419: Propulsion</p> <p>(3) AE 424: Aerospace Systems Engineering</p> <p>(3) AE 447: Aerospace Laboratory</p> <p>(3) ME 329: Engr Analysis II</p> <p>(3) General Ed. - Human Thought and Behavior elective</p> <p>(1) ME 449: Senior Seminar</p> <p>16 credit hours</p>	<p><u>Semester 8</u></p> <p>(3) AE 428: Aerospace Design Project Laboratory</p> <p>(3) AE or approved ME elective</p> <p>(3) Mathematics elective</p> <p>(3) General Education - Viewing a Wider World elective</p> <p>(3) History elective</p> <p>15 credit hours</p>
Total credit hours for Senior Year: 31	
Total credit hours for Graduation: 129 (same as ME)	
<p><i>Highlight indicates existing courses to have relatively small title and/or topic changes; required of both Aero and ME majors</i></p> <p><i>Highlight indicates new courses that differ from the basic ME curriculum: 27 credits; required of Aero majors</i></p> <p><i>Highlight indicates ME or Aero elective taken from Vibrations, FEM, Plates & Shells, CFD, Controls, etc.</i></p>	