### University of Central Florida
#### Department of Mechanical, Materials and Aerospace Engineering
#### 2007 - 2008 MECHANICAL ENGINEERING Degree Requirement

<table>
<thead>
<tr>
<th>Semester</th>
<th>Major Courses</th>
<th>Electives</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST YEAR</strong></td>
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<tr>
<td><strong>Fall</strong></td>
<td>128 Semester Hours</td>
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<tr>
<td>EGN 1006 Introduction to Engineering Profession</td>
<td>1(1,2)</td>
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<tr>
<td>ENC 1101 English Composition I</td>
<td>3(3,0)</td>
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<tr>
<td>*MAC 2312 Calc. II</td>
<td>4(3,1)</td>
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<tr>
<td>*PHY 2048 Physics for Engineers I w/lab</td>
<td>4(4,0)</td>
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<tr>
<td>ECO 2013 Econ I (preferred) or ECO 2023 Econ II</td>
<td>3(3,0)</td>
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<td><strong>Spring</strong></td>
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<tr>
<td>MAC 2311 Calc. I</td>
<td>4(3,3)</td>
<td>3(3,0)</td>
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<tr>
<td>ENC 1102 English Composition II</td>
<td>3(3,0)</td>
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<tr>
<td>*MAC 2312 Calc. II</td>
<td>4(4,0)</td>
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<tr>
<td>SPC 1016 Oral Comm. For Engineers (pref.) or SPC 1600 Oral Communication</td>
<td>3(3,0)</td>
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- **FOURTH YEAR (ENERGY SYSTEMS OPTION)**

**Fall** (15 credit hours, 21 contact hours)
- EML 3102 Mechanical Sys. Thermodynamics 3(3,0)
- EML 4501C Engineering Design I 3(1,6)
- EML 4703C Fluids II 3(3,0)
- EML 4312C Feedback Control 3(2,3)
- Approved Technical Elective 3(3,0)

**Spring** (15 credit hours, 21 contact hours)
- EML 4304C Energy Systems Lab 2(1,3)
- EML 4502C Engineering Design II 3(1,6)
- EML 4415 Special Topics in Heat Transfer 1(1,0)
- Approved Technical Elective 3(3,0)
- Approved Technical Elective 3(3,0)
- Cultural & History Foundations 3(3,0)

**Third Year**

- EML 3303C Mechanical Engineering Meas. (PR: EGN 3343) 3(3,0)
- Science Foundation 3(3,0)

- **FOURTH YEAR (MECHANICAL SYSTEMS OPTION)**

**Fall** (15 credit hours, 21 contact hours)
- EML 4501C Engineering Design I 3(1,6)
- EML 4304C Engineering Design II 3(1,6)
- EML 4304C Energy Systems Lab 2(1,3)
- EML 4312C Feedback Control 3(2,3)
- Approved Technical Elective 3(3,0)
- Approved Technical Elective 3(3,0)

**Spring** (15 credit hours, 23 contact hours)
- EML 3303C Mechanical Engineering Meas. (PR: EGN 3343) 3(3,0)
- Science Foundation 3(3,0)

- **FOURTH YEAR (MATERIALS OPTION)**

**Fall** (15 credit hours, 21 contact hours)
- EMA 4102 Thermodynamics and Kinematics of Matls. 3(3,0)
- EML 4501C Engineering Design I 3(1,6)
- EMA 3124 Selection and Design of Materials 3(3,0)
- EML 4312C Feedback Control 3(2,3)
- Approved Technical Elective 3(3,0)

**Spring** (15 credit hours, 21 contact hours)
- EMA 3012C Exp. Tech. in Mech. and Mat. 3(2,3)
- EML 4502C Engineering Design II 3(1,6)
- EMA 4223 Principles of Mechanical Behavior (PR: EGN 3365) 3(3,0)
- Approved Technical Elective 3(3,0)
- Cultural & History Foundations 3(3,0)

- **IMPORTANT NOTICE**

- *Grade of C or better is required.*

- **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 insure 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: 6/6/2007