### York College of Pennsylvania

**2011-2012 Academic Year**

Baccalaureate Degree (Minimum 141 Credits)
Cumulative “2.0” or Better Required for Graduation

Worksheet for **Mechanical Engineering, B.S.**
Dept. of Physical Sciences

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**Common Core:** 17 Credits

- Analytical Reading/Writing \( \text{WRT102} \)
- Academic Writing \( \text{WRT202} \)
- Human Communication \( \text{CM104} \)
- Information Literacy \( \text{IFL101} \)
- Calculus I \( \text{MAT171} \)
- Physical Education (2 crs.)

**Area Distr. Requirements:** 6 Credits

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<tr>
<th>I. Fine Arts &amp; Humanities</th>
<th>6 Credits</th>
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<th>II. Social &amp; Behav. Sciences</th>
<th>6 Credits</th>
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<th>III. Laboratory Sciences</th>
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**Satisfied by Major Requirements**

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<th>IV. Amer./West. Civ., Amer. Gov't.</th>
<th>6 Credits</th>
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<th>V. Int'l. Studies/Foreign Lang.</th>
<th>6 Credits</th>
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**Required Major Courses:** 88 Credits

- Fund. of Computer Science I \( \text{CS101} \)
- Fund. of Electrical Engineering \( \text{ECE280} \)
- EPADS I \( \text{EGR100} \)
- EPADS II \( \text{EGR102} \)
- Mathematical Methods \( \text{EGR240} \)
- Career Training Prep. \( \text{EGR290} \)
- Statistical/Process Con. \( \text{EGR305} \)
- System Modeling and Analysis \( \text{EGR342} \)
- Automatic Control \( \text{EGR392} \)
- Statics \( \text{ME250} \)
- Dynamics/Vibration \( \text{ME252} \)
- Materials Science \( \text{ME260} \)
- Materials Science Lab \( \text{ME261} \)
- Strength of Materials \( \text{ME264} \)
- Materials/Solids Lab \( \text{ME265} \)
- Thermodynamics \( \text{ME330} \)
- Instrument/Processor Lab \( \text{ME351} \)
- Fluid Mechanics \( \text{ME360} \)
- thermo/fluids Lab \( \text{ME361} \)
- Machine Design \( \text{ME380} \)
- Capstone Design I \( \text{ME400} \)
- Capstone Design II \( \text{ME402} \)
- Heat Transfer \( \text{ME410} \)
- Thermal System Design \( \text{ME411} \)
- Finite Element Analysis \( \text{ME415} \)
- Engineering Physics/Mech \( \text{PHY160} \)
- Engineering Physics/E&M \( \text{PHY260} \)

**Required Electives:** 12 Credits

- General Chemistry I \( \text{CHM134} \)
- Calculus II \( \text{MAT172} \)
- Differential Equations \( \text{MAT272} \)

**Plus One of the Following:**

- Applied Controls \( \text{EGR442} \)
- Applied Energy Systems \( \text{ME430} \)
- Applied Kinematics & Dynamics \( \text{ME460} \)
- Special Topics in Engineering \( \text{ME470} \)
- Special Topics in Engineering \( \text{ME474} \)
- Independent Study \( \text{ME480} \)

**Plus One of the Following:**

- Applied Thermal Sciences \( \text{ME432} \)
- Applied Mechanics & Materials \( \text{ME462} \)
- Special Topics in Engineering \( \text{ME472} \)
- Special Topics in Engineering \( \text{ME476} \)
- Independent Study \( \text{ME482} \)

**Required Engineering Co-Op:** (6 Credits)

- Co-op I \( \text{EGR491} \)
- Co-op II \( \text{EGR492} \)
- Co-op III \( \text{EGR493} \)

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1. All courses must be completed with a minimum “2.0” grade. Courses may not be taken on a pass/fail basis.
2. A minimum of 12 credits of the Area Distribution Requirements must be at the 200-level or above. Courses may not be taken on a pass/fail basis. See Registrar’s Office for official list of courses.
3. Six credits are to be taken in one of these two areas; if foreign language is selected, six credits must be in one language.
4. Requirements listed apply to students who matriculate into or declare this major during the 2011-2012 academic year.

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(Signed) Faculty Advisor Date

(Signed) Dept. Chair Date