### Instructions:
Use this form to plan out your coursework before registering for courses in your first year. List all graduate courses you plan to take as part of your Ph.D. program (including courses to be taken for your possible M.S. Degree). In the Term column, list the course number and units. Your total number of units should equal at least the number listed in the Total Column. See other side or the Catalog for details on Areas to be covered and restrictions. THE STUDENT IS RESPONSIBLE FOR OBTAINING INTERIM ADVISOR SIGNATURE AND RETURNING COMPLETED FORM TO THE OPTION SECRETARY (TOM-119) BY MID-OCTOBER.

For further information refer to web site: [http://www.me.caltech.edu/student_information.html](http://www.me.caltech.edu/student_information.html)

### Prior Degrees:
- **Bachelor:**
  - Institution: 
  - Year: 
- **Master:**
  - Institution: 
  - Year: 
- **Other:**
  - Institution: 
  - Year: 

### Graduate Studies Began at Caltech:
- Month: 
- Year: 

See backside for coursework requirements

<table>
<thead>
<tr>
<th>Course Work</th>
<th>Term 1</th>
<th>Term 2</th>
<th>Term 3</th>
<th>Term 4</th>
<th>Term 5</th>
<th>Term 6</th>
<th>Beyond</th>
<th>Total # of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject #1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>(18)</td>
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<tr>
<td>Subject #2</td>
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<td>(18)</td>
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<tr>
<td>Subject #3</td>
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<td>(18)</td>
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</tbody>
</table>

**Additional Courses:**

<table>
<thead>
<tr>
<th>Math/Advanced Math</th>
<th>Advanced Math</th>
<th>(27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Seminar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>summer</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>summer</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units**
- Term 1: (36)
- Term 2: (36)
- Term 3: (36)
- Term 4: (36)
- Term 5: (36)
- Term 6: (36)
- Beyond: (54)

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The undersigned agree that the coursework listed meets the specific course requirements for the Ph.D. in Mechanical Engineering, provided that the student takes and passes the courses with a grade of at least C.

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**APPROVED BY:**

- Interim Advisor's Name (printed)
- Interim Advisor's Signature
- Date

- M.E. Option Representative (printed)
- M.E. Option Rep.'s Signature
- Date

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F:\Daily - ME Sec & Opt Office\MASTER FORMS\2. G1 - Students\Forms\2007-08 ME AM- Coursework Plan Matrix
REQUIRED COURSE WORK:

- Pass with a grade of at least C a minimum of 18 units of course work in any three core mechanical engineering subjects spanning at least two broad areas listed below. Examples of suitable courses are given in parentheses.

**Area 1**
Fluid Mechanics (Ae/APh/CE/ME 101 abc)
Mechanics of Structures and Solids (Ae/AM/CE/ME 102 abc)
Continuum Mechanics of Solids and Fluids (Ae/Ge/ME 160 ab)

**Area 2**
Thermodynamics and Statistical Mechanics (ME 118, APh 105, Ch/ChE 164, Ch 166)
Heat and Mass Transfer (ME 119 ab)
Combustion (ME 120 ab)

**Area 3**
Dynamical Systems (AM/CE 151 abc or CDS 140 ab)
Mechanical Systems and Design (ME 115 ab, ME 171, ME 175)
Controls (CDS 110 ab, CDS 212)

The student may petition the mechanical engineering faculty to accept alternate subjects or areas. These changes should retain core mechanical engineering knowledge and represent sufficient breadth. The petition must be submitted to the option representative and approved before the student registers for the course.

These 54 units may also be used in the student’s program for the master’s degree.

Additional Courses:
- Pass with a grade of at least C an additional 54 units (with a course number above 100) that pertain to the student’s specialty and are approved by the dissertation supervision committee in engineering or science.

Math/Advanced Math:
- Pass with a grade of at least C 27 units of advanced courses in mathematics or applied mathematics chosen in consultation with their adviser from the following list: ACM 101 or higher, AM 125, CDS 201, CDS 202, Ma 108 or higher, Ph129. The requirement in mathematics is in addition to the requirements above and cannot be counted toward a minor.

Research:
- Successfully complete at least 54 units of research and demonstrate satisfactory research progress.

The requirement of a minimum grade of C will be waived for an advanced course which (i) lists one of the courses in Areas 1, 2, and 3 as a prerequisite, and (ii) is offered only pass/fail.

*See Caltech Catalog 2008-09 for complete details*