### Section 1. Course Title and Description

<table>
<thead>
<tr>
<th>Prefix &amp; No.</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 230</td>
<td>Engineering Design Methods</td>
<td>2</td>
</tr>
<tr>
<td>ME 230L</td>
<td>Engineering Design Methods Lab</td>
<td>0</td>
</tr>
</tbody>
</table>

Course Description: Introduction to the engineering design process, including development of the problem statement, modeling, research, cost/benefit analysis, and interaction of system components. Design optimization techniques will be used to drive design decisions. The course will incorporate consideration of economic, social, environmental and manufacturing constraints within the engineering design process. Design projects will be used to instill these concepts.

ME 230 Prerequisites: EM 214 Statics, ME 121-121L Production and Fabrication Processes and Lab, and ME 212-212L Mechanical Engineering Design Technologies and Lab

ME 230 Co-requisites: ME 230L

### Section 2. Review of Course

Will this be a common or unique course? (select the appropriate option below)

- [x] This course will be a unique course. (Go to Section 3.)

### Section 3. Other Course Information

1. Are there instructional staffing impacts?
   - [x] No. Replacement of ME 240, Intro to Mechanical Design, 3 credits which is being deleted. Effective date of deletion: Spring 2017

2. Existing program in which course will be offered: Mechanical Engineering

   
   Provide a brief justification: The course consists of a combination of traditional lectures in the classroom supported and complemented by learning exercises and design projects conducted in the laboratory.

4. Proposed primary delivery: 001 Face to Face – Term Based Instruction

5. Term in which change will be effective: Fall 2015

6. Can this course be repeated for additional credit? No

7. Will the grade for this course be limited to S/U (pass/fail)?
   - [x] No

8. Will section enrollments be capped? No

9. Will this course be equated (i.e. considered the same course for degree completion) with any other unique or common course in the course database?
   - [x] No

10. Is this prefix already approved for your university?
    - [x] Yes

### Section 4. To be completed by Academic Affairs

1. University department code: SME

2. Proposed CIP code: 14.1901
   
   Is this a new CIP code for this university? [x] No