Please fill in all information. Required signatures are on page two of this form. Please return to: 
Academic Affairs Committee, Office of the Provost, Anderson Hall, 2nd Floor.

**Contact Person:** JEFF PARMEESTER  
**Phone:** 946-2470

**Date:** 9/18/03  
**School or College:** ENGINEERING  
**Department:** MECHANICAL

**Proposed Course #:** ENGR 5  
**Title:** INTRODUCTION TO BIOENGINEERING

**Units:** 1  
**Enrollment/Expected Enrollment:** 15-20  
**Grade Option:** A-F

**Prerequisites:** ENGR 5

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**Catalog description:**

Introduction to the various sub-disciplines (biomedical, electrical, and mechanical) of bioengineering. Prerequisite: ENGR 5 (Spring)

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Please attach a syllabus.

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What are the reasons for the new course (e.g., student needs, major, etc.):

This course would be the first bioengineering course for bioengineering majors. Bioengineering is a very broad field. As a result, it is important to touch on as many topics as possible in order to enhance the students' understanding of the many career opportunities that bioengineering offers. The outcome will be that the students will be better prepared to select their sub-discipline and define their study plans.

**If approved, when will this be implemented?** SPRING 2004

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What is the anticipated impact on resources (e.g., Faculty, funds, library materials etc.):

Existing Bioengineering Faculty can cover the course using existing funds, facilities, and library materials.

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Describe any special facilities, furnishings, or technology needs. List software needs, if any.

Computer labs maintained by the School of Engineering & CSci will be utilized as needed.
APPROVAL PROCESS

Please obtain all signatures before submitting to Academic Affairs Committee. Please acquire signatures in the order in which they are listed below.

1. Action by department requesting addition/change:
   Approved by: [Signature] Date: 9/18/03

2. Action by the Curriculum and/or Graduate Studies Committee of the School/College:
   Approved by: [Signature] Date: 

3. Action by the Dean of the School/College:
   Approved by: [Signature] Date: 9-15-03

4. Action by the General Education Committee (as appropriate):
   Approved by: N/A Date: 

5. Action by the Dean of the Library:
   Approved by: [Signature] Date: 10-8-03

6. Action by the Director of Educational Technology Services (if computer lab needed):
   Approved by: N/A Date: 

7. Action by the Graduate Studies Committee (as appropriate):
   Approved by: N/A Date: 

8. Action by the Registrar (to check course number, etc.):
   Approved by: [Signature] Date: 9-26-03

9. Action by the Academic Affairs Committee:
   Approved by: Date: 

After approval by the Academic Affairs Committee, information regarding new, revised, or deleted courses is sent to the Registrar for listing in or modifying the catalog.

Form revised 9/4/03
Proposed Syllabus - BENG 5 - Biomaterials - 6/24/03

Spring Semester

Weekly Homework Assignments
Project

Fifteen class sessions per semester.

<table>
<thead>
<tr>
<th>Approx. No. of Classes</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Engineering Achievements (combined with ECPE 5)</td>
</tr>
<tr>
<td>1</td>
<td>Trends in Bioengineering (O'Brien)</td>
</tr>
<tr>
<td>1</td>
<td>Introduction to Biomaterials (Burmeister)</td>
</tr>
<tr>
<td>2</td>
<td>CA Tobacco Control (Bal)</td>
</tr>
<tr>
<td>1</td>
<td>MEMS - What can they do? (Krysec)</td>
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<tr>
<td>1</td>
<td>Dental School</td>
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<tr>
<td>1</td>
<td>Imaging (Stark)</td>
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<tr>
<td>1</td>
<td>Biomechanics (Lee)</td>
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<tr>
<td>1</td>
<td>Is a Robot in your Future? (Hughes)</td>
</tr>
<tr>
<td>1</td>
<td>Engineering and the legal system</td>
</tr>
<tr>
<td>1</td>
<td>Bioethics</td>
</tr>
<tr>
<td>2</td>
<td>Projects</td>
</tr>
<tr>
<td>1</td>
<td>Senior Projects; Course Wrap up</td>
</tr>
</tbody>
</table>