TO: The Faculty of the College of Engineering

FROM: The Faculty of the School of Biomedical Engineering

RE: New Graduate Course, BME 69699, BME Professional Practice Graduate Internship

The faculty of the School of Biomedical Engineering has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**BME 69699 BME Professional Practice Graduate Internship**
Offered Fall, Spring, Summer, 0 cr., Experiential
Restrictions: Graduate Standing

**Description:** Graduate-level internship course in BME providing training in the professional skills that lead to career success in the biomedical field.

**Reason:** The recent growth in the biomedical industry in the United States has created a demand for well-trained biomedical engineers with strong professional skills. Our partner companies have encouraged the Weldon School to encourage our graduate students who are interested in industry positions to participate in experiential opportunities to increase their marketability and appeal to industry and to help them focus their research in a more deliberate way.

George N. Wodicka
Dane A. Miller Head and Professor
Weldon School of Biomedical Engineering

Approved for the faculty of the School of Engineering by the Engineering Curriculum Committee
EGC Minutes 12-13-16
Chairman EGC
# REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF A GRADUATE COURSE

## (50000-80000 LEVEL)

### DEPARTMENT: Biomedical Engineering  
### EFFECTIVE SESSION: Spring 2017

#### INSTRUCTIONS: Please check the items below which describe the purpose of this request:

- [ ] 1. New course with supporting documents (complete proposal form)
- [ ] 2. Add existing course offered at another campus
- [ ] 3. Expiration of a course
- [ ] 4. Change in course number
- [ ] 5. Change in course title
- [ ] 6. Change in course credit/type
- [ ] 7. Change in course attributes
- [ ] 8. Change in instructional hours
- [ ] 9. Change in course description
- [ ] 10. Change in course requisites
- [ ] 11. Change in semesters offered
- [ ] 12. Transfer from one department to another

### PROPOSED:

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
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<tbody>
<tr>
<td>BME</td>
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<table>
<thead>
<tr>
<th>Course Number</th>
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<tbody>
<tr>
<td>69699</td>
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**Long Title:** Biomedical Engineering Professional Practice Graduate Internship

**Short Title:** BME Prof Grad Intern

**Abbreviated title will be entered by the Office of the Registrar if shorter. (30 CHARACTERS ONLY)**

### TERMS OFFERED:

- [ ] Fall
- [ ] Spring
- [ ] Summer

### CAMPUS(ES) INVOLVED:

- [ ] Calumet
- [ ] N. Central
- [ ] Cont Ed
- [ ] Tech Statewide
- [ ] Ft. Wayne
- [ ] W. Lafayette
- [ ] Indianapolis

### CREDIT TYPE:

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<table>
<thead>
<tr>
<th>Schedule Type</th>
<th>Minutes</th>
<th>Meetings Per Week</th>
<th>Weeks Offered</th>
<th>% of Credit Allocated</th>
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<tbody>
<tr>
<td>Lecture</td>
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<tr>
<td>Recitation</td>
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<td>Presentation</td>
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<td>Laboratory</td>
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<td>Lab Prep</td>
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<tr>
<td>Clinic</td>
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<td>Experiential</td>
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<td>Research</td>
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<td>Ind. Study</td>
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<td>Pract/Observ</td>
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### COURSE ATTRIBUTES:

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<thead>
<tr>
<th>Check All That Apply</th>
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<tbody>
<tr>
<td>1. Pass/Not Pass Only</td>
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<td>2. Satisfactory/ Unsatisfactory Only</td>
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<td>3. Repeatable</td>
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<td>4. Credit by Examination</td>
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<td>5. Fees</td>
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<td>6. Registration Approval Type</td>
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<td>7. Variable Title</td>
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<td>8. Honors</td>
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<td>9. Full Time Privilege</td>
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### COURSE DESCRIPTION (INCLUDE REQUIREMENTS/RESTRICTIONS):

Graduate-level internship course in BME providing training in the professional skills that lead to career success in the biomedical field.

**COURSE LEARNING OUTCOMES:**

Students will be able to integrate theory, skills and principles taught in the core biomedical engineering curriculum with professional skills, awareness, and methodologies learned during the on-site internship.

Students will be able to apply these integrated skills and principles to solve real-world problems.

### OFFICE OF THE REGISTRAR

(Grad Form 40G [Excel format] - Does not include the Graduate Council's required supporting document. See pdf version of Form 40G)
Detailed Graduate Course Proposal for Academic Review

To: Purdue University Graduate Council

From: Faculty Member: Vickie Maris
      Department: BME
      Campus: West Lafayette

Subject: Proposal for New Graduate Course

Contact for information if questions arise:
Name: Tammy Siemers
Phone: 60294
Email: tsiemers@purdue.edu
Address: MJIS 1021

Course Number: BME 69699
Course Title: BME Professional Practice Graduate Internship
Short Title: BME Prof Grad Intern

Course Description:

Graduate-level internship course in BME providing training in the professional skills that lead to career success in the biomedical field.
A. Justification for the Course

Justification of the need for the course

The recent growth in the biomedical industry in the United States has created a demand for well-trained biomedical engineers with strong professional skills. Our partner companies have encouraged the Weldon School to encourage our graduate students who are interested in industry positions to participate in experiential opportunities to increase their marketability and appeal to industry and to help them focus their research in a more deliberate way.

Justification that course will be taught at a graduate level

• There is currently a need for a grad level course for those students who would like to enrich their education through professional experiences. This internship course will provide a very important and highly desired option to superior students who are oriented towards developing stronger technical skills and a broader industrial knowledge base than they would develop without this exposure. By introducing such a course, the School of Biomedical Engineering will also be able to offer and track internship opportunities to our graduate student body as well as meet the course standards that ISS is requiring.
• This allows the students who are on internship for the degree program to stay an active Purdue student during their internship.
• As with other current courses set-up in the Office of Professional Practice and in other schools, students will enroll in a 0-credit hour experiential course during the internship with full time privileges. The approved professional practice fee will apply and a repeatable course will be set up so that students that are gone for more than a semester, can enroll for each semester they are gone.

Justification of the demand for the course

• As experiential opportunities are becoming a necessity for students to become competitive in either a technical or research oriented career in industry, we are starting to see the number of graduate students participating in experiential opportunities increase.

• Anticipated enrollment
  o Undergraduate 0
  o Graduate 5-25 a year

Justification for online delivery

N/A
C. Prerequisite(s)

- None

If no prerequisites, explain rationale:
- Permission of instructor will validate that student has an offer letter from an approved company. We will also require written approval from the graduate student’s faculty advisor.

D. Course Instructor(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Rank</th>
<th>School, dept., or center</th>
<th>Graduate Faculty or expected date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vickie Maris</td>
<td>Director of Graduate Programs</td>
<td>BME</td>
<td>No</td>
</tr>
</tbody>
</table>

E. Course Schedule or Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic(s)</th>
<th>Activity (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of Internship</td>
<td>- Course work will consist of work-integrated learning that is directly related to the student’s research development experiences</td>
<td>- As assigned by supervisor.</td>
</tr>
</tbody>
</table>

F. Reading List (including course text)

Primary Reading List

There is no reading list required for this course.

G. Library Resources

<table>
<thead>
<tr>
<th>Name of journal, proceedings, book, video, or other acquisition</th>
<th>Already in Libraries?</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are no library resources needed for this course</td>
<td>N/A</td>
</tr>
</tbody>
</table>
H. Course Syllabus

The requirements for this course are outlined below. Students will be instructed by their supervisor as to what their internship requirements will be. We will require the following documentation as part of the course:

- Assignments as directed by internship supervisor (job description)
- Student offer letter
- Written consent from the student’s faculty advisor
- Present the information gained during their experience to either their faculty advisor or the Graduate Program Office depending on their circumstances
- Provide an updated CV/Resume with new skills highlighted