Biomedical Engineering Undergraduate Research Form

Engineering or Science Elective Credit

FOR THE STUDENT: Please fill out this side of the form.

Research Topic: _____________________________________________________

<table>
<thead>
<tr>
<th>CRN</th>
<th>SE Units</th>
<th>EE Units</th>
<th>2 Quarters Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Engineering 199</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
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Estimate average student/faculty contact (hours/week) _________

Estimate average student research effort (hours/week) _________

Course Plan:

Part I: The Research Proposal
- Complete both sides of the BIM 199 form.
- Attach 1-2 page Research Proposal describing the background, aims, methods, and anticipated results of your proposed work. Include a statement of the significance of the work (why it is important to study).
- Obtain PI’s signature.
- Submit to UG advisor.
- Obtain CRN from UG advisor for Quarter 1 and 2, and register for 2 units each quarter.

Until Part II is successfully completed, this research will count as lab credit only.

Part II: The Presented Results
At the end of the stated 2 quarters, the results must be presented in one of the following formats:
- 30-minute formal PowerPoint presentation at conference or lab meeting (not including questions).
- 10-page double-spaced paper.
- 15-minute formal PowerPoint presentation or conference-style poster presentation (e.g. URC) and 5-page double-spaced paper.

Obtain copy of BIM 199 form from UG advisor:
- Obtain PI’s 2nd signature as approval of work.
- Resubmit BIM 199 form with attached work to UG Advisor for UG Committee approval.

Once UG Committee approval is obtained, then 4 units of lab credit will be counted towards Engineering or Science elective.

Student: __________________________________ I.D. # _____________________ Major: _______________

BIM 199 engineering elective units already completed (quarter and units) ______________________________

Total number of units completed to date: (84 units required to take 199 course for degree credit) ______________________________

Other special study courses this quarter. Department: ___________________________ Units: _____________

The limitation on special study courses (99, 194H and 199) is 5 units per term with the exception of courses approved as part of the Independent Study Program. For 199, engineering elective units are required for 2 units/quarter for a total of 4 units maximum.
FOR THE INSTRUCTOR/PI: Please fill out this side of the form.

Instructor’s Name: ____________________________________________

Please select either Engineering or Science elective credit and check the appropriate boxes.

ENGINEERING ELECTIVE CREDIT ______   OR   SCIENCE ELECTIVE CREDIT ______

To be considered for Engineering Elective credit, the completed report must demonstrate all of the following:

☐ A clear statement of engineering deliverables or engineering design objectives.
☐ An overview of existing engineering solutions in the field.
☐ Evidence of testing/validation and quantitative analysis of results.
☐ A clear statement of the impact of the completed work on society.

Describe the engineering content of the project below.

To be considered for Science Elective credit, the completed report must demonstrate all of the following:

☐ An overview of the scientific background underlying the project with appropriate literature citations.
☐ A clearly stated, testable hypothesis.
☐ Evidence of ability to design, analyze, and interpret the results of experiments.
☐ A clear statement of conclusions and their relation to the field at large.

<table>
<thead>
<tr>
<th>Part I</th>
<th>Part II</th>
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</table>
| I certify that I have reviewed the attached Research Proposal and this project is suitable as 4 units of (check one): | I certify that:
| Engineering elective ______                 | One of the following was completed at C- or better quality for 4 units of upper division engineering/science elective credit. |
| Science elective ______                    | ☐ 30-minute Powerpoint (not including questions) |
|                                             | ☐ 10-page double-spaced paper                 |
|                                             | ☐ 15-minute Powerpoint or poster presentation, and 5-page double-spaced paper |

I certify that:
☐ The completed work is suitable for elective credit as described in the Engineering & Science Elective sections above.

Instructor’s Signature  Date

BME Undergraduate Committee’s Signature  Date

Instructor’s  Signature  Date

BME Undergraduate Committee’s Signature  Date