# MSE 490 Research Course

MSE 490 is a course intended to give students an opportunity to do materials research with one of our core or courtesy appointed faculty members.  It requires the consent of the faculty member before a student can enroll.  This form and proposal process must be followed and the faculty member must agree to the number of credits and quality of the proposal (if required) by signing this form.

Junior and senior students (or others receiving permission from the Program Advisor) wishing to do research for credit (MSE 490) must submit a proposal that includes this form, signed by you and your Advisor by the 3rd week of the same term of the project. A proposal is not required if you are only enrolling for 1 credit.  Enrollment in MSE 490 implies a commitment of time each week, with the number of hours to be determined by your Faculty Research Advisor, of unpaid research.

In addition to your proposal, a final report covering your research must be written and submitted by the end of the term (by the end of finals) in which you are enrolled. Both the proposal and the final report must be submitted to both your Advisor and to the Undergraduate Program Office (after approval by the research advisor). If you fail to submit a final report, credit for your MSE 490 course will not count toward either the MSE Program Elective or as a Tech Elective.

**Elements of the course:**
1. Written Proposal (waived if enrolling for 1 credit)
2. Attendance at group meetings
3. Research
4. Analysis
5. Deliverable:  A written report (length and detail commensurate with the number of credits earned) must be approved and graded by the research advisor by the end of the term to receive credit for the course.  If the student writes a paper for publication, presents a poster at a national conference, or gives a talk at a national conference, the the paper, poster, or slide deck for the talk can be submitted in lieu of the written report with the permission of the research advisor.  The deliverable must be evaluated and graded by the research advisor before sending to the UG program advisor.

**Please write a 2 or 3 page proposal with the following elements:**

1. Title
2. Advisor
3. Project overview and objectives (~⅓ page)
4. Background: literature review or information from research group (~1 page)
5. Questions and/or hypotheses (~¼ page)
6. How you plan to answer the questions and/or test your hypotheses (~½ page)
7. Potential impacts of research to technology and/or society (~⅓ page)
8. References

**The proposal and this form must be approved by the research advisor. The signature below represents approval of the proposal and project. Both the proposal and form must be submitted together.**

**MSE 490 Project in the _____Research Group**

**Term: _____, Credit hours: _____.**

Student Name: _____

E-mail address:_____

Faculty Research Advisor Name:_____

Faculty signature (**represents approval of both the proposal and the project**):

_____

**Statement to be signed by student:**

I have read the requirements for a MSE 490 project and understand the expected work requirement, including meetings with my Advisor. I understand that I will not receive either MSE Program Elective or Tech Elective credit if I do not submit a final report. The final report will document what I have achieved in this research project, and how the educational objectives and outcomes described in this proposal were met.

Signature: _____ Date: _____

UG Advisor approved_____