

Guidelines for the Materials Science and Engineering Senior Research Project (MEMS 1079)

The Senior Research Project is one of two capstone experiences for the Undergraduate Materials Science and Engineering Program. It consists of a 3-credit engineering research project that takes place over **one** semester. The aim of the project is to give the student the opportunity to experience an open ended research project in the context of a topic related to the Materials Science and Engineering curriculum. The project must be undertaken individually with the help of an Academic Supervisor who is a faculty member in the Department of Mechanical Engineering and Materials Science. The student is responsible for obtaining an Academic Supervisor who will agree to be the advisor for the project. The Department of Mechanical Engineering and Materials Science will not provide funding for the project which must be arranged through the Academic Supervisor.

The student is required to become familiar with the background of the project and understand the goals of the project in the context of materials science and engineering. **The student must submit an abstract to Dr Nettleship including the title and the name of the Academic Supervisor, by the end of the second week of the semester. The student should also submit a written literature review to the Academic Supervisor by the end of the 5th week of the semester. The final presentation must contain experimental/modeling design, experimental/theoretical results obtained by the student during the semester in which they are registered for MEMS 1079 along with pertinent interpretation and conclusions.**

At the end of the semester the student must prepare a report in the format of a manuscript submitted to an archival journal. The student is also required to make an oral presentation of the research project. A copy of the Report signed by the Academic Supervisor must be submitted to Professor Nettleship by the last day of classes for a grade to be awarded. The Academic Supervisor should award a letter grade for the project and inform Professor Nettleship by the last week of the semester. Failure to submit the required Report and/or give the oral presentation by the end of the semester could result in an automatic F grade for MEMS 1079.

Ian Nettleship
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