

Materials Science and Engineering
Boise State University
Guidelines for Internships and Independent Study

I. INTERNSHIPS

Students are encouraged to seek out internships during their undergraduate career. Internships bolster your experience and skills, provide a resource for references and letters of recommendation, and help distinguish your resume when you are applying for jobs or to graduate schools. With an internship, you will be able to learn about different engineering positions within an organization, providing insight on potential career paths. Some students have also transitioned from an internship to a full-time permanent position upon graduating.

You can work with the [Career Center](#), the College of Engineering Advising Center, and the Materials Science and Engineering Department to help identify internship opportunities. In addition, you can use search engines, such as [Indeed.com](#), to locate internship opportunities.

A. GUIDELINES

In addition to meeting all university requirements for internships, students seeking to earn credit for their internship must also abide by the following guidelines.

1. Students can receive up to 3 credits of MSE 293/493 Internship per semester where 1 internship credit equates to 45 hours worked per [university policy](#).
2. All internships that are being used to fulfill MSE 293/493 must be approved by the student's academic advisor.
3. Internship credit cannot be applied toward meeting degree requirements. The internship credit, however, will be on your transcript, which provides a record of your intern experience.
4. Internship credits are graded as pass/fail.
5. Internship credit is only applicable for internships that require being enrolled in a STEM-related field. For other fields (public policy, business, etc.), internship credit will be approved by your academic advisor on a case-by-case basis.
6. Students cannot use internship credits for work/research performed at an academic institution or educational immersion programs.
7. Students must submit a 2 page (at minimum) proposal for internship credit that describes where they will work, the details of the internship project, how the project is related to the field of materials science and engineering, and the contact information for the student's direct supervisor. In addition, the proposal should include a description of any previous work carried out with the same employer prior to applying for internship credit. The proposal should be submitted to the academic advisor with the Internship Application for Academic Credit prior to registering for

internship credit. The proposal and form will be considered for approval by the MSE Undergraduate Curriculum Committee.

8. The proposal must be submitted no later than the last day of the first week of classes.
9. The MSE Undergraduate Curriculum Committee will assign an internship advisor (from among the MSE faculty) for mentorship and to evaluate the student's work.
10. By the last day of regular classes in the semester (prior to finals week), the student must submit a 6 to 10 page report to her/his internship faculty advisor, the MSE Undergraduate Curriculum Committee, and the student's direct supervisor at the internship. The report should follow the format of a formal journal article including a literature review. Students will be given a template to use for the final report.
11. The student must also submit an updated resume and a short letter highlighting the main achievements during the internship. The letter should be similar to a cover letter which highlights the student's skills and achievements.
12. Determination of the student's grade will be done by the internship faculty advisor, in consultation with the student's direct supervisor at the internship.

II. INDEPENDENT STUDY

In addition to meeting the university's [independent study policy](#), students seeking to take Independent Study for credit must also abide by the following department learning outcomes and requirements.

A. LEARNING OUTCOMES

An independent study is intended to be at the same level of rigor as a 300 or 400-level MSE course with, at a minimum, the following learning outcomes.

1. Ability to formulate an effective research plan or literature review utilizing the appropriate materials science and engineering concepts
2. Ability to communicate materials science concepts effectively
3. Ability to learn independently
4. A knowledge of contemporary issues
5. Ability to identify structure, properties, processing and performance relationships (for literature review based independent studies) or to apply and integrate knowledge from structure, properties, processing and performance to solve materials-based problems (for hands-on research independent studies)
6. Additional learning outcomes as identified by the supervisor and student

B. REQUIREMENTS

1. Independent Study is reserved for upper-division students (defined here to be those students who are enrolled in or have completed MSE 305 and MSE 308) seeking to supplement their education with a focused self-study or research project.
 - a. For self-studies, the independent study is expected to function as a course on a topic not currently offered. For example, students could take an independent study to delve very deeply into the fundamentals related to research that they are performing, allowing them to develop a better understanding of the subject than what they would gain simply through the expected research activities.
 - b. For a hands-on research-based independent study (if the student is employed within a research lab), the student is expected to perform work outside their normal responsibilities.
2. A student cannot be paid for work performed as part of an independent study.
3. Students can count up to 3 credits of MSE 496 Independent Study toward their technical or engineering electives.
4. For 3 credits of independent study, the student is expected to work a minimum of 10 hours per week (as would be expected for a 3 credit course).
5. To be counted as a technical or engineering elective, the Independent Study must be taken for a letter grade.
6. Additional Independent Study credits can be taken in subsequent semesters, but will not count toward the degree requirements. In addition, any Independent Study credits beyond the first 3 credits will be graded as pass/fail.
7. MSE 496 Independent Study must be performed at Boise State University. The independent study advisor should be a faculty member in the Materials Science and Engineering Department.
8. Requests for an Independent Study advisor outside of the Materials Science and Engineering Department will be reviewed on a case-by-case basis by the Materials Science and Engineering Undergraduate Curriculum Committee.
9. The scope and technical requirements are set by the student's supervisor for the project.
10. Students must submit a 2 page (at minimum) proposal for independent study that describes the topic of study and the deliverables associated with the project as agreed upon with the independent study supervisor. The deliverables should be spaced throughout the semester instead of requiring only a single report at the end of the semester. The proposal should include the evaluation criteria and must also articulate how the student intends to demonstrate each learning outcome. The proposal should be submitted to the academic advisor with a note from the faculty member who will supervise the independent study endorsing the proposal. Before enrolling in the independent

study, approval must be obtained from the student's academic advisor and the MSE Undergraduate Curriculum Committee.

11. For reference, deliverables can include, but are not limited to, assimilating the work performed as part of the Independent Study into a final report, presentation and/or poster.
12. By the last day of regular classes in the semester (prior to finals week), the student must have completed and submitted all of the deliverables described in the project proposal.
13. Determination of the student's grade will be done by the independent study supervisor.