



MSE Research Internship
MSE 5061
Fall 2022
Department of Materials Science and Engineering

Instructor:
Office: _____
Office Hours: _____
Phone: _____
Email: _____

Teaching Assistant: _____
Office: _____
T.A. Hours: _____
Phone: _____
Email: _____

Pre-requisites: Full Major Status in Materials Science & Engineering
Lecture:
Lab:
Credit Hours: 3

Text(s): _____

Course Description: This course will allow students to earn academic credit for the successful completion of a Materials Science and Engineering-related internship in a research lab. To have an internship fulfill a Technical Elective requirement, students must earn a total of 3 credit hours and complete research assignments as encouraged by the faculty mentor. The internship progress will be monitored, evaluated, and graded by the research faculty mentor. Students must take an active role in finding and applying for an appropriate internship before enrolling for the course.

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Course Outcomes: Students will:

1. Apply mathematical, scientific, and engineering knowledge to research projects under the direction of a faculty mentor

2. Conduct hypothesis-driven research, whether computational or experimental, that includes the analysis and interpretation of data and results obtained
3. Learn effective communication with faculty mentors and other student researchers in the research environment regarding logistics, problem-solving, and giving and receiving feedback for the improvement of their research methods and processes

Content Overview: The content of the research internship will vary, based on the research interests of the faculty mentor and student, but students commit to their faculty research mentor that they will spend a minimum of 10 hours per week in the research lab, conducting meaningful work that progresses the research objectives of the lab and that they will attend research group and individual mentor meetings as planned by the faculty mentor. The student research intern is expected to be an integrated, fully-contributing member of the research group, where their work and feedback to other researchers in the group are valued and respected. All internships must receive approval by the faculty mentor prior to the beginning of the semester, where the student and faculty member will create a mentorship agreement and where they will select a project and establish the working agreement of the internships, including expectations and requirements for receiving each letter grade.

Grading & Evaluation Methods: To meet the technical elective requirement:
 Attendance in the lab—40%
 Communication with the faculty mentor and other researchers—10%
 Faculty evaluation of the student—40%
 Performance of meaningful research—10%

Key Dates:

University Policies

- 1. *The Americans with Disabilities Act.*** The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, (801) 581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

- 2. *University Safety Statement.*** The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.

- 3. *Addressing Sexual Misconduct.*** Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).