

Materials Science Internship
MTSC 989
1-3 credit hours
Summer 2023
Department of Applied Physical Sciences
University of North Carolina - Chapel Hill

Instructor

Instructors will vary based on the student enrolled in the internship course. The instructor will typically be the student's faculty advisor.

Course Description

An internship can be an important component of graduate training for students earning a Materials Science doctoral degree. Students can complete the internship and accompanying report in any year of their study, as appropriate for their particular research area and progress in their graduate training.

The purpose of the internship is to expand research training and exposure to non-academic workplace environments. The student's faculty advisor and an onsite internship mentor will supervise the internship. Students work directly with their faculty advisor and their external contacts to identify internship opportunities and complete a learning agreement for the internship experience.

There are no specific course pre-requisites.

Students may register for 1-3 credits of MTSC989 in multiple semesters to correspond with the work completed. For example, students may register for 1-3 credits during the semester when completing the internship and 1-3 credits when completing the internship report and presentation. Students can complete the internship, report and presentation in the same semester.

The internship requires at least 300 hours of experiential learning. The internship report and presentation will be evaluated and graded by the student's internship mentor and faculty advisor.

Learning Objectives:

- Apply knowledge and skills learned in the classroom and academic laboratory in a nonacademic setting.
- Understand the social, political, economic, and organizational context within which their specialty activities occur.
- Contribute to the work and impact of an organization.
- Aid in the solution of problems within their specialty.
- Observe and learn from professionals in the field.

- Explore areas of professional interest and develop career goals.
- Gain feedback on research and professional skills and abilities.
- Become acquainted with, and network with, non-academic groups engaged in their specialty.

Course Requirements

- Complete at least 300 hours of work at internship site.
- Presentation at the end of the project highlighting project goals, challenges, and results. Students are required to deliver a public oral presentation to the academic community summarizing the project that will also include a question and answer session. This presentation will be evaluated by the student's faculty advisor. It is also expected that the student will make a final presentation at the internship site.
- Report
Students are required to write a document that explains the work completed and lessons learned for the internship project(s). This document can take many forms and the student should select a document type that is most appropriate to their particular internship experience. Document types include, but are not limited to, white paper, technical report, or business plan. Identifying an appropriate document format is an important component of writing the internship paper. If guidance is required to determine the appropriate paper format, the student should consult with the sponsoring organization professional and faculty adviser. The internship paper will be evaluated by the student's faculty advisor.

Recommended Readings/Preparation

Readings and preparation will vary depending on internship placement. Students should work closely with their mentor/advisor to identify appropriate readings and content to support their work.

Grading

A grade (High pass, Pass, Low pass, or Fail) will be assigned to each of two internship components.

- Internship performance
The sponsoring organization mentor and academic adviser will evaluate the internship at least two times during the internship and recommend a final grade for the student. It is recommended that the student is evaluated at the internship mid-point and at the end of the experience. Both the mid-point and end evaluations should be discussed with the student and comments and action items included so that the evaluation is a growth opportunity for the student. The grade will be received in the semester during

which the student completes the internship.

- **Paper and presentation**

The student's mentor and faculty advisor will evaluate the internship report and presentation. This grade will be received in the semester during which the student completes the paper and presentation.

Grad Grade	Range
H	95-100
P	80-94
L	70-79
F	69 or below

Registration

This course is repeatable for credit.

Time Table

Students will establish a timetable with their faculty adviser and host organization mentor in the Learning Agreement and will follow this timetable.

Honor Code

The University of North Carolina at Chapel Hill has had a student-led honor system for over 100 years. Academic integrity is at the heart of Carolina and we all are responsible for upholding the ideals of honor and integrity. The student-led Honor System is responsible for adjudicating any suspected violations of the Honor Code and all suspected instances of academic dishonesty will be reported to the honor system. Information, including your responsibilities as a student is outlined in the Instrument of Student Judicial Governance. Your full participation and observance of the Honor Code is expected.