

Mechanical Engineering Honours Thesis – Guidelines

Calendar Description:

MECH 498 Honours Thesis Units: 3.0 Hours: 2-18

The honours thesis provides an opportunity for selected students to carry out a major research or design project under the supervision of a faculty member. The project will require independent study of the current technical literature, and independent research or design work. Each student will present a complete report at the end of the term, and make an oral presentation of the findings.

Note: This course may only be taken once. Credit will be granted for only one of MECH 497, 498 or 499.

Prerequisites: Approval of the Department. Available only for students who have completed all 3rd year courses with a minimum GPA of 6.0.

Regulations

This 3.0 unit project course can be taken by students with strong academic records as an alternative to a 4th year technical elective and the MECH 499 project course.

A student taking MECH 498 must have completed all 3rd year courses with a minimum GPA of 6.0/9.0. Only under special circumstances can a student apply for exemption of this rule (e.g. incomplete 3rd year, or lower 3rd year GPA with high GPA in 4th year courses already taken).

A student wishing to take MECH 498 must find a suitable faculty member within the Department and, together with the supervisor, submit an application form.

To allow for processing time, the complete application must be received in the Department Office at least 6 working days before the last day for adding courses in the term MECH 498 is to be taken (as specified in the calendar). The student will be notified 2 days before the last day to add classes on the success of the application.

The course can be completed either in one term or in two academic terms. If completed in two terms, the student will have an incomplete grade assigned at the end of the first term and it will remain until the thesis has been completed and evaluated. It is expected that the project will normally be started and completed in one term - either term 4A or 4B.

Deliverables and Grading

Student and supervisor will meet weekly to discuss project progress.

A midterm report (research proposal) must be submitted to the supervisor no later than the 5th week of the term; its format and an earlier deadline may be specified by supervisor.

The final project report will be due at the last day of examinations in the respective term. The format of the report will be set by the supervisor; it is expected to follow a standard thesis format

(Introduction, Problem Statement, Literature Review and Previous Work, Methodology, Results, Discussion, Recommendations for Future Work, and References).

All students taking MECH 498 in a term will present their findings in a 20 minute presentation during a collective presentation session that will take place during the examination period (to be organized by the Department Office/Undergraduate Advisor).

Grading will be completed by the project supervisor. The final mark will consist of: 20% on midterm progress report, 20% on presentation (10% on technical content and 10% on presentation delivery), and 60% on the final report. The 20% presentation mark will be assigned by a group of three professors, including the supervisor, in attendance at the presentation.