Projects in Mechanical Engineering permits selected students with upper division standing (60+ hrs completed) and with at least a 2.75 GPA to work on individual projects under the direction of faculty members in Mechanical Engineering. It is required that this is an unpaid project, a minimum of 10 hours per week of time be devoted to the project. Participation in the ME Undergraduate Research Poster Competition is required and scheduled approximately 3 weeks prior to the last class day of the semester. A final written report will be submitted to the instructor/ supervisor by the reading day prior to final examinations. For further information about the course, please see reverse side.

Students should register for the course during the appropriate registration period; therefore, a faculty supervisor and project should be considered and identified well in advance of registration. Students should talk with professors as soon as possible since projects are assigned on a first-come-first-served basis. DO NOT WAIT UNTIL AFTER REGISTRATION TO IDENTIFY A PROJECT AND SUPERVISOR!

This Restricted Course Authorization Form, signed by your supervisor, and project proposal should be submitted to the ME Undergraduate Advising Office (ETC 2.146) before Registration Access Period 1. Failure to meet this deadline may result in the student being ineligible for registration. The Undergraduate Faculty Advisor will then read over the proposal and also sign the form giving the student permission to register for the course. Once signed by the Undergraduate Faculty Advisor, the student will be enrolled in the course selected by the Academic Advising Coordinator.

SEMIESTER: ____________________________ COURSE: 177K, 277K, or 377K UNIQUE: ____________
SUBMITTED BY: _______________________ UT EID: ___ DATE: ________

STUDENT ACKNOWLEDGEMENT
Please sign below that you have read and acknowledge ALL project requirements for this course.

STUDENT SIGNATURE: ___________________________ DATE: ____________

PLEASE ATTACH PROJECT PROPOSAL
FOLLOWING FORMAT OUTLINED ON REVERSE SIDE.

APPROVALS:
Instructor/Supervisor:
I certify this student will be working on an unpaid project a minimum of 10 hours per week, and will work to deliver a required final report and poster.

Print ___________________________ Sign ___________________________ Date

Undergraduate Faculty Advisor:

Print ___________________________ Sign ___________________________ Date
OVERVIEW: Projects are performed under the tutorial supervision of a faculty member, and may involve extensive interaction with graduate students working in allied areas. The projects frequently involve extensions of individual problems that have occurred in the regular curriculum courses. Other projects may reflect the interest of a student in a specific problem. Arrangements for students to undertake programs under this course number usually result from informal discussions with one or more faculty members. The project is restricted within the limitations of time, resources, and equipment available. The work undertaken also must be commensurate with the credit hours requested (varies within the scope of the project).

PROJECT PROPOSAL: A student electing this course is responsible for preparing a project proposal following the format described below.

Project Statement: A brief (250 to 500 word) synopsis of the background, objective, and procedures to be followed in the project.

Schedule: A meaningful estimate of the time required to complete various phases of the project including preparation of the final report and poster. This should include a number of distinct and clearly identifiable benchmarks of progress toward completion of the project. (10 hours minimum per week.)

Requirements: A list of estimated project requirements including equipment, supplies, services, and laboratory space. To the extent possible, be specific in identifying space and equipment, if already on hand. Indicate the probable time period for use of any general-purpose equipment and whether your use would limit the availability of the equipment of other users. Indicate availability of needed supplies. Do not neglect the delays of purchasing and delivery during a one-semester project. Finally, indicate what special shop services will be required beyond work that you can do. Obtain an estimate of the shop time required from the ME Shop Foreman.

Budget: An itemized list of all costs for project requirements including equipment, supplies, services, and lab space. Be concise, but thorough, when indicating the source of funds, particularly those to come from ME.

Requested Credit: A justification for receiving credit for ME 177/277/377K. Projects and topics vary considerably in the amount of effort required to reach the stated objectives. Careful consideration, with faculty counsel, should be given to this request. Include several statements justifying the proposed credit.

PROJECT NOTEBOOK AND REPORT: Except for those special projects where it is clearly inappropriate, each student is expected to obtain a bound project notebook (e.g., National 53-110, 1-1/2" x 10" cross section) in which to keep all of his or her work, daily records, experimental data, etc. Although this record, a written report, and other requirements specified by the supervising professor will constitute the basis for the acceptance and grading of the project, the course grade is based on the poster presentation and the final report. The final report should be turned in to the supervising professor following their requested format. This final report must be turned in no later than noon of the reading day prior to final examinations. The student should be sure to keep one copy for his or her own personal records.

POSTER PRESENTATION COMPETITION: Students are required to submit a poster to the Academic Advising Office three weeks prior to the last class day of each semester to ensure time for printing and participation in the poster competition.

Purpose: A forum for students doing research to present their work and findings to their peers and faculty advisors, as well as the broader University community.

Content: The poster should consist of a combination of text, figures, graphics and/or photographs. Be creative, clear and concise. The information should be organized into Motivation and Background, Materials and Methods, Results, Conclusions and Discussion, and References sections. Be sure to include the title of the project, student name, and faculty supervisor’s name on the poster.

Printing: Students should prepare the poster (maximum size, 24" x 36") in color. The ME Undergraduate Faculty Advisor must approve all incompletes.

Attendance: Students are required to present their poster in person at the ME Undergraduate Research Poster Competition. More detailed information will be sent via e-mail during the semester. Students are also encouraged to participate in a university sanctioned research event using the same poster. Two annual events include the Texas Student Research Showdown and the Longhorn Research Bazaar.

GRADING: If a student fails to submit a report or participate in the poster competition according to the deadlines, a grade of incomplete ("X") will be recorded. If the supervisor assigns a grade of incomplete, both the student and the supervisor must present documentation supporting the grade to the Undergraduate Advisor no later than 7 days prior to the last class day of the semester or summer session. The ME Undergraduate Faculty Advisor must approve all incompletes.