

ECET 478/479 Senior Project Guidelines

Introduction:

ECET 478/479, Senior Design Project, is a capstone course to verify that the graduating student is able to carry out research and implementation of an applied design in electronics.

The student must prove that he/she can take an idea from conception through a working prototype, complete with presentations and documentation.

Discussion:

ECET 478 will be devoted to project proposal and selection. At the end of this course, students will submit a project proposal that will include the objective, justification, description, approach, schedule, cost, equipment, materials, block diagrams, schematics, and references. An oral presentation will be made.

Projects will be completed individually or in small groups. If a small group approach is used, the proposal will include specific delineation of each person's participation in both the hardware and software elements of the project. Project funding and sponsorship can be obtained from private sources (personal interest projects), external agencies or businesses (company projects) or the University (departmental projects).

Projects must have both hardware and software components. The hardware component will include design, layout, and assembly, testing and troubleshooting. The computer component can be part of the design process, an integral part of the system operation, a simulation of the design or the processing and evaluation of data developed by the system.

ECET 479 will be used for actual construction and implementation of the design. Weekly progress reports will be made and adherence to projected schedules will be evaluated.

The final three weeks of ECET 479 will be reserved for test, evaluation, and preparation of the final report and oral presentations.

Requirements:

1. Both topic and project outline must be approved by the instructor.
2. Must result in a piece of hardware, software, or other useful engineering component.
3. Performance of component is to be compared by appropriate engineering analyses.
4. Component is to be demonstrated to E&T faculty and students.
5. Must maintain a journal of progress and difficulties.