

SENIOR DESIGN

The Senior Design Project incorporates theoretical and experimental concepts in the analysis and design of an engineering system. Student teams participate in the planning, analysis, and design of integrated and realistic engineering projects. Knowledge gained in previous courses is used to incorporate technical, ethical, legal, societal, multicultural, economical, financial, aesthetic, and environmental aspects in the solution. The Senior Design Project includes:

- Applications of theoretical and experimental engineering concepts
- Teamwork
- Instruction on management and planning
- Multidisciplinary projects (for mechanical, electrical, & computer engineering students)
- Supervision by faculty advisors
- Oral and written communications skills

While the full responsibility for progress and content rests with the student, each design project is conducted under the supervision of faculty advisors and often with the advice of a representative of a sponsoring organization.

Mechanical, electrical, & computer engineering students work in multidisciplinary teams to design, construct, and test an engineering system. Civil engineering students work in teams that focus on one of the civil engineering disciplines, such as environmental, geotechnical, structures, transportation, and water resources. These interdisciplinary groups work together to complete a common project. Activities may also include field trips and presentations by practicing professionals.

Some projects are suggested and sponsored by businesses, industries, consulting firms, and government agencies. Other project topics originate from the special interests of students and College of Engineering faculty. The following pages provide a representative list of the College of Engineering's senior design projects from recent years. Faculty research interests and acknowledgment of sponsors and research organizations are indicated.

[Civil Engineering Projects](#)

[Electrical & Computer Engineering Projects](#)

[Mechanical Engineering Projects](#)

[Multidisciplinary Team Projects](#)

[Key Faculty Members](#)

[Cooperating Companies and Individuals](#)