

*“The class was very helpful and provided a valuable learning experience which will benefit me greatly in future endeavors.”*  
—Student

*“I wanted to express my appreciation for the excellent job that the student team did on their innovative EVA tether hook design project. They performed a very good background and requirements study that will be useful in the future.”*  
—NASA

*“I am very pleased with the efforts of the team. This was a project our hydro-plant operators were interested in pursuing. I am impressed with the maturity and professionalism of the students.”*  
—Ford Motor Company



## Department of Mechanical Engineering

### Technical Areas

- Materials Engineering
- Operations Research and Industrial Engineering
- Manufacturing and Design
- Dynamic Systems and Control
- Thermal/ Fluid Systems
- Nuclear and Radiation Engineering
- Robotics
- Biomechanical Engineering
- Acoustics

## Senior Design Projects Sponsorship

Working with the capstone program for graduating Mechanical Engineering seniors

THE UNIVERSITY OF TEXAS AT AUSTIN



Design Projects Program  
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The Senior Design Projects (SDP) Program serves as the capstone course for graduating Mechanical Engineering students at UT.

This program ensures that students are well-prepared to work as professional engineers by giving them the opportunity to collaborate with external sponsors on real-world engineering problems. The goal is for students to both gain invaluable experience, and also to demonstrate their competence in areas of theoretical modeling, prototyping, and design standards and safety adherence.

The SDP program run by UT actively solicits project proposals from both the public and private sectors. Frequent sponsors include companies such as Schlumberger, Ford, Applied Materials, Lockheed Martin, Dell, Fluor Daniel, National Instruments, Texas Instruments, Dow Chemical, General Motors, government agencies like NASA and Los Alamos National Laboratory, as well as smaller startup entrepreneurs. The results of our student projects are often implemented by industry.

We invite you to submit a project proposal to our administrative office. Please review and consider the many benefits sponsorship offers to you and to the training of tomorrow's leading innovators.



## Reasons to Sponsor

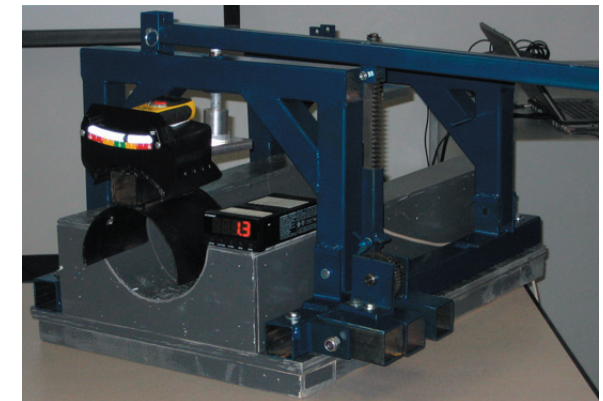
- Opportunity to have 3 to 4 senior engineering students, along with their faculty advisors and TAs, tackle your engineering problems, for which you may not currently have the time or resources
- Reasonable, tax-deductible subvention fee
- Opportunity to make a valuable contribution to the training of society's future engineers
- Identify potential employees for your organization after graduation
- Official recognition from the University
- Standard project components include:
  - Project definition
  - Patent searches
  - Design solutions
  - Alternative designs
  - Cost analyses
  - Oral presentation of findings
  - Written report



## Previous Projects

### Sample Titles

- *Design of an Unpressurized Manned Rover for Use on the Moon or Mars*
- *Design of a Water Removal System for Recycled Vegetable Oil*
- *Sport Utility Vehicle Third Row Seat Redesign*
- *Design of System to Lower Air Inlet Temperature for a Combustion Gas Turbine Generator*
- *Redesign of Projection Welding Locating Pins and Bushings*
- *Design of a Semiconductor Docking Tool*
- *Removal of Water Vapor from a Semiconductor Fabrication System*
- *Device to Remove a Thin-Walled Liner from a Drill Collar*
- *The Design and Building of a Thermal Control for a Microprocessor Under Test*
- *Design of a Device to Monitor Failure Behaviors of DC Brushless Motors*



LWD (Logging While Drilling) Collar Alignment Apparatus