



SAN DIEGO STATE
UNIVERSITY

Mechanical Engineering Senior Design Project Sponsored by [Organization]

All students in Mechanical Engineering are required to complete a one-year senior design project in their final year. This project constitutes their capstone design experience. The project has to run consecutively through two semesters.

Typically, students work in a team of five. The team is structured to represent a design team in industry with specific tasks for each member of the team on weekly or bi-weekly basis. The team has to undertake the full sequence of activities involved in bringing a product to the market in industry, including detailed analysis, planning, designing for manufacture, making CAD drawings, machining/manufacturing the product, testing and validation, making modifications as needed.

Major Design Reviews (Preliminary Design Review and Major Design Review) are conducted at periodic intervals. Students have to make oral presentations and submit a comprehensive report at the end of each semester.

Examples of recent projects include a “Gas-to-Wire Solution for Flare Gas Reduction” and “CFD Analysis of a new 16MW Titan 130 Turbine enclosure ventilation design” sponsored by Solar Design, “Hand-held foreign object debris detection system” and “Sonobuoy attachment device” sponsored by Northrop Grumman, and a “Tesla turbine within Organic Rankine Cycle” sponsored by Honeywell Refrigerants.

The design team will interact closely with a representative(s) from your organization during the course of the project, usually through a mentor. Each organization may submit a proposal(s) that includes the project title, objectives of the project, brief description, deliverables, and timeframe (either August-May, or January-December).

Two examples of ME projects from 2017 Design Day are shown below.



2017 Design Day Project



2017 Design Day Project



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Mechanical Engineering Senior Design Project Organization Application

1. Project title

2. Objectives

3. Description

4. Deliverables

5. Timeframe

August – May

January – December

Contacts

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Giving to San Diego State University

The Campanile Foundation is the philanthropic arm of San Diego State University, responsible for receiving and managing gifts benefiting the University. Incorporated as a 501(c)(3) tax-exempt corporation in August 1999, the foundation has worked tirelessly to supplement state budgets where needed in order to enhance and increase philanthropic support.

Please make check payable to The Campanile Foundation at SDSU and include "C00200 Mechanical Engineering Senior Design" in the memo. Amount to be determined based upon project needs.

The Campanile Foundation
Attn: Gift Administration
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