

Mechanical System Design Project

Teams of 3-4 students select from projects supplied by real customers. Each team is advised by a member of the Senior Design staff. The project has the following objectives:

To provide realistic reasons to perform detailed design calculations.

To provide design practice using the same procedures as Senior Design.

Startup: [Teams](#) [Projects](#)

Phase 1 - Design Specifications (20%)

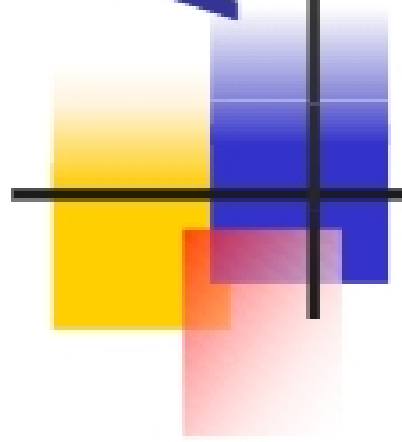
- [Description](#)
- [Deliverables](#) (Memo, UDesign, Sketches, Schedule)
- [Grading Rubric](#)

Phase 2 - Concept Selection (30%)

- [Description](#)
- [Deliverables](#) (Memo, UDesign, Sketches, Schedule, Drawings, Presentation, Peer Evaluation)
- Grading Rubrics ([Memo](#), [Presentation](#))

Phase 3 - Design Completion (50%)

- [Description](#)
- [Deliverables](#) (Memo, UDesign, Sketches, Schedule, Drawings, Presentation, Peer Evaluation)
- Grading Rubrics ([Memo](#), [Presentation](#))



Approach (JD Consulting, Inc.)

- Customers need:
 - Specific mechanical component design
 - A professional process
- Scenario
 - Team assigned for 11-week project
 - Expertise
 - Customer – Initial Market
 - Team – Design process
 - Benchmarking
 - UDesign
 - Machine design



Communication

- Initial Customer Meeting – ASAP
 - Have an agenda
 - Get the context
 - Discuss tasks
- Subsequent weekly Customer meetings
 - Delegate tasks
 - Meet internally
 - Make progress in between