



# The O.T. Swanson Multidisciplinary Design Lab

**PARTNERING WITH INDUSTRY SINCE 2000**

## Highlights

- Senior Capstone
- Real design projects
- Multidisciplinary
- Since 2000:
  - 5,100 Students
  - 735 Sponsored Projects
  - 85 Community Service Projects

## Engineering Disciplines

- Computer & Systems
- Design, Innovation and Society
- Electrical
- Industrial & Systems
- Materials
- Mechanical

## Why Partner?

- Fresh Ideas
- Practical Solutions
- Innovation Pipeline
- Potential Hires
- Experienced Staff Engineers

## Real Problems, Real Solutions

The Design Lab provides a real-world learning experience for undergraduate engineering students. Multi-disciplinary teams (6-8 students) solve open-ended, complex engineering problems. Sponsors provide the problem, the mentors, and the funding. Faculty and staff provide day-to-day guidance, design process instruction, and technical consultation. The Design Lab provides an active learning space, support staff, and technical support services. Students provide the enthusiasm.

## Students

Practice real world engineering to prepare for career success

## Sponsors

Gather creative ideas and practical solutions



## Sponsor Benefits

- Solve a technically challenging problem of importance to you
- Safely evaluate high risk ideas with low investment
- Stimulate new and creative thinking within your team
- Get acquainted with the best and brightest engineering minds
- Recruit students as champions for your products and services
- Build relationships with RPI students/faculty/staff

*"We were delighted with the successful software demonstration Design Lab students conducted, mapping the interior layout of our offices with their cellphone, having no prior knowledge of the space. Well done!"*

— Chief Scientist, BAE Systems

[WWW.DESIGNLAB.RPI.EDU](http://WWW.DESIGNLAB.RPI.EDU)



## THE O.T. SWANSON MULTIDISCIPLINARY DESIGN LAB

### Mission:

Develop high-performing engineers by mentoring students in professional and engineering design practices through project-based learning.

### Resources

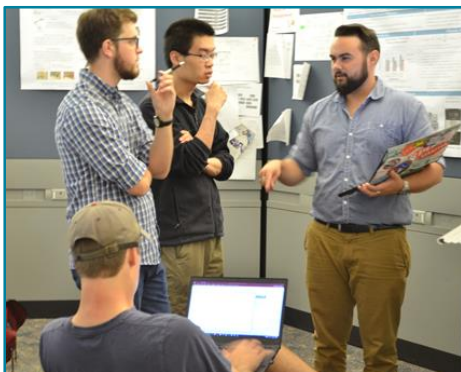
- Innovative Students
- Multidisciplinary Faculty Team
- Professional Engineering & Support Staff
- Extensive Laboratory Facilities
- Fabrication Area
- 3-D printing Facilities
- Web-based Collaboration

### Focus Areas

- Data Analytics/Data Visualization
- Energy and Sustainability
- Engineering for a Better World
- Health, Wellness & Assistive Technologies
- Internet of Things
- Manufacturing, Automation and Control
- Product Development
- Reliability and Test Systems

### Results:

Well-defined, innovative solutions for sponsors and a multidisciplinary learning experience for senior engineering students that prepares them for career success.



*“Your students are terrific. Their enthusiasm for this project and the effort they put into it was obvious. The students’ attention to the details that were outlined for them and recognition of the challenges we face with these children was impressive.”*

— Ray Walsh MD, Double H Ranch Medical Advisory Board and Camp Volunteer Physician

### Interested in Partnering?

For additional information, to evaluate project feasibility or to contribute to the Design Lab:

### Contact

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