ENGINEERING INNOVATION STUDIO

Hosted by Matthew Swenson
Assistant Professor, Mechanical Engineering and
Director, Interdisciplinary Capstone Design Program

- LAB UPGRADES AND RENOVATIONS
Engineering students work in interdisciplinary teams on creative projects sponsored by industry partners, private individuals or U of I departments.

Courses in the program emphasize the design process and the creation of a thoughtfully engineered, tested and validated outcome or prototype.

Top 7 in the nation for “infusing real-world experiences into engineering education” through our undergraduate Senior Capstone Design Program

– National Academy of Engineering
ELEVATING THE CAPSTONE EXPERIENCE

- Interdisciplinary Program
- Highlight of undergraduate experience
- Collaborate with numerous industry clients throughout the Pacific Northwest and beyond
- Opportunities for small and large corporations to recruit talented young engineers
IMPROVING THE STUDENT EXPERIENCE

Objective: Transform the Senior Design Suite into a Centralized Hub for developing leadership, entrepreneurship, collaboration, and innovation skills.

The project also aims to modernize the facilities, creating an attractive space to improve student recruiting and retention.
Located in Gauss-Johnson Engineering Laboratory

Multipurpose space for prototyping (main space) and collaboration (meeting room)

Adjacent to the ME Machine Shop

Dedicated workspace to centralize senior design team efforts and display projects throughout the academic year.
ENGINEERING INNOVATION STUDIO

ARTIST RENDERINGS

- Acoustic ceiling tiles for reduce ambient noise and increase comfort
- Modern furniture to enhance comfort and facilitate collaboration
- Aesthetic improvements
- Repainting and refurbishing existing workbenches
DESIGNING A SIGNATURE SPACE

Focus is on both assembly area and back room

Major upgrades to infrastructure and furnishings
Glass entryway to increase visibility of program and invite visitors

Large glass windows adjacent to doors (visibility from hallway)

Additional entrance (LH side of image)

Modern door security access (keyless) enhancing student accessibility
TRANSFORMING THE BACK ROOM

into a modular collaboration, teaching, and learning space

Modern, flexible, and rearrangeable furniture

Movable partitions to create flexibility for client meetings, design reviews, or socially distant collaboration.

CAPSTONE DESIGN STUDIO
GAUSS 108
University of Idaho
College of Engineering

DESIGN WEST
ARCHITECTS
LEADING AND INNOVATING

LEADERSHIP & COLLABORATION

1. Emphasis on Teamwork & Value Proposition

2. Longitudinal Assessment of Leadership skills

3. Academia --> Industry Research

INNOVATION & ENTREPRENEURIAL SPIRIT

1. Leverage Summer-Fall Capstone
   a. Intercollegiate collaboration to create new inventions
   b. Invention Disclosures:
      i. Braille business card printer (CDAR)
      ii. Assistive CPR device (WWAMI)
      iii. Fish Vaccination System (CNR)

2. Expand relationship with Invent Idaho via:
   a. UG Mentoring
   b. Create a project pipeline for Capstone
We rely on the philanthropic support of our dedicated alumni friends and trusted industry partners to bring this amazing project to reality.

**Project Financial Structure**
- **Phase 1** - $50,000
  - Polished concrete floor and painting
  - Clean-up of utilities and electrical improvements
  - Floor-to-ceiling white boards
- **Phase 2** - $100,000
  - Light fixtures and “I” logo accent
  - Ceiling tiles and soundproofing
  - Add second exit (required for code)
  - Large presentation monitor
- **Phase 3** - $50,000
  - “Storefront” entrance door
  - Upgrades to back room
- **University Overhead/Contingency** - $50,000

**Fundraising**
- $20,000 committed from ME department
- College website - [https://www.uidaho.edu/giving/engr/facility-upgrades](https://www.uidaho.edu/giving/engr/facility-upgrades)

**HELP US REACH OUR GOAL**

For more information on ways to support this effort, contact **Bobbi Hughes**, Executive Director of Advancement, at bhughes@uidaho.edu.