

Fall 2022 Engineering Capstone Design – Snapshot 2
ZOOM Presentations
Tuesday, December 6, 2022

Poster Presentations

Project Name	Project Sponsor	Lead Dept.	Instr.
Session 1 (3:30 – 3:50 pm)			
• *A – 3-wheeled Bicycle e-Tractor	UI and Invent Idaho	ME	SB
• 01 – Robotic Assembly of Photovoltaic Arrays	NASA ISGC	ME	MM
• 05 – Universal Circuit Board Pallet	Schweitzer Engr. Lab.	ME	MS
• 12 – Oil Film Interferometry	Kodiak Aircraft	ME	VD
• 21 – Infrasonic Wildfire Detection	Stanley Solutions	ECE	HH
• 22 – Optical Device Arm Alignment	Hansen Photonics	CS	BB
• 27 – Evaluation of Biofilm Resistant Coatings...	NASA EPSCoR	BE	RQ
• *CdA2 – Band Glasses	UI Marching Band & CS	CS	JS
Session 2 (3:50 – 4:10 pm)			
• 02 – Prandtl-D Wing Demonstration	NASA ISGC	ME	VD
• 08 – Saw Tool Attachment for Manipulator	Idaho National lab.	ME	MS
• 14 – Impulse Measurement Device	Vista Outdoor	ME	MM
• 18 – Detecting and Locating Cancelling Faults...	Schweitzer Engr. Lab.	ECE	BJ
• 20 – Secure Donkey Car Demonstration	Idaho Scientific	ECE	YC
• 23 – Gamified Computers and Networks Visual...	UI CS	CS	BB
• 29 – Cell Shear Stress Bioreactor	UI BE	BE	RQ
• *B – Network Craft III	UI CS	CS	BB
Session 3 (4:10 – 4:30 pm)			
• 07 – Pendant Controller	Bastian Solutions	ME	SB
• 09 – Lab-scale Continuous Casting Demonstration	Idaho Nat. Laboratory	ME	MM
• 11 – Fuel Crash Shutoff	Kodiak Aircraft	ME	MS
• 16 – CubeSAT-Small Payload Balloon Drop	NASA ISGC	ECE	YC
• 25 – Big Data Analysis for Elliptical Pattern Identification	UI ChemE	CS	BB
• 32 – Pulsatile Flow in Non-Rigid Tubes	UI BE	BE	RQ
• CdA – Automated Insertion of Keys	Schweitzer Engr. Lab.	CS	JS
Session 4 (4:30 – 4:50 pm)			
• 03 – Cryo- Tensile Test Fixture	NASA ISGC	ME	MM
• 06 – Leg Exoskeleton for MS Walking Assistance	Haagenson Endowment	ME	JP
• 15 – MLM Armrest Adjustment	Hyster-Yale	ME	MS
• 24 – AI/ML based Natural Language Interfaces...	UI CS	ECE	YC
• 26 – Automated Visio Construction	UI CS	CS	BB
• 33 – Electrical Stimulus and Response Measurement...	UI BE	BE	RQ
• *C – Cyber Security	UI CS	CS	BB

* Fall completion project

Notes:

- Use the Capstone Design Hall, which is a single Zoom session using Breakout Rooms:
 - o <http://www.uidaho.edu/capstone-zoom-hall>
 - o Password: **expo2023**
- All rooms will always be left open. Attendees can move from room to room on their own.
- Presentations will occur in the specified rooms at the times outlined above

Poster Presentations:

- During each 20-minute session, students should plan to:
 - o Present a single-slide poster, with it displayed continually throughout the session
 - o Prepare an ~3 to 5-minute verbal description of their project (highlighting key points on the poster)
 - o Field and answer questions from the audience
 - o Deliver the verbal overview 2-3 times during their session
- Poster template:
<https://www.webpages.uidaho.edu/mindworks/Capstone%20Design/Templates/Poster-template-white.pptx>

Student Attendance:

- Each student is required to **attend at least 3 different team presentations (not your own)**
- Make a **logbook entry** for each presentation to verify attendance, and:
 - o Reflect on the overall experience and key takeaways
 - o Identify aspects of the presentation that went very well, and any potential areas that the presenting team could improve (keep it constructive)
 - o Specify any lessons learned that you will apply to your own future presentations