

Fall 2023 Engineering Capstone Design – Snapshot 1
ZOOM Presentations
Tuesday, October 10, 2023

Poster Presentations

Project Name	Project Sponsor	Lead Dept.	Instr.
Session 1 (3:30 – 3:50 pm)			
• 01 – Robotic Assembly of Photovoltaic Arrays	NASA ISGC	ME	MM
• 02 – Prandtl-D Wing Demonstration	NASA ISGC	ME	PY
• 08 – Hot Cell Window Polishing Tool	Idaho National Lab.	ME	MS
• 13 – Automotive Style Cab Door Windows	Hyster-Yale	ME	MS
• 17 – Arcadia Lake Pump Station	NASA ISGC	ECE	KS/RN
• 21 – Combined GPS and Intensity Based Alignment...	Hansen Photonics	CS	BB
• 23-24 – Hardware and Software Virtualization of ICS and HMI	UI CS	CS	BB
• 27 – Shear Stress Bioreactor	UI BE & Stanley Solutions	BE	RQ
Session 2 (3:50 – 4:10 pm)			
• 03 – Wildfire Smoke Generator	UI CNR	ME	MR
• 05 – Fisheries Wastewater Recapture	McKinstry	ME	PY
• 09 – Glass and Dust Separation System	Idaho National Lab.	ME	MM
• 16 – Automatic Tool Changer for End of Arm Tools	Bastian Solutions	ME	MS
• 18 – Spacecraft Radiation Sensing and Radio Communications	NASA ISGC	ECE	KS/FL
• 22A – Gamified Computers and Networks: Devices	UI CS	CS	BB
• 25 – Build AI Foundation Models and APIs...	UI CS	CS	BB
Session 3 (4:10 – 4:30 pm)			
• 04 – Updated Ember Generator	UI CNR	ME	MR
• 07 – C-arm Relocation Guidance	Dr. Hiller	ME	PY
• 12 – No Maintenance Pivot Point	Hyster-Yale	ME	MS
• 15 – Controlled Velocity Projectile Acceleration	Vista Outdoors	ME	MM
• 19 – DC Power Bus in Residential/Commercial Buildings	Idaho Power	ECE	KS
• 22B – Gamified Computers and Networks: Networks	UI CS	CS	BB
• 26 – AI-enhanced Smart Physical Rehabilitation	UI CS	CS	BB
Session 4 (4:30 – 4:50 pm)			
• 06 – Portable Emissions-Testing Trailer	UI CSC	ME	KK
• 11 – Oil Film Interferometry	Kodiak Aircraft	ME	PY
• 14 – Low-Cost Metal Forming Fixture	Schweitzer Engineering Lab.	ME	MR
• 20 – Portable LED Scoreboard	Friday Night Flag	ECE	KS
• 29 – Shock Circuit for Virtual Fence System	UI BE	BE	RQ
• 30 – Automated Ring/Mount Assembly Machine	Nightforce	ME	MS
• 31 – Smart Plank Inspection & Navigation...	Wildwood Grilling	CS	JS

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: **expo2024**
- 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.