

ECE Senior Design Program

Agenda for August 23, 2023

Senior design requirements

1. Senior Design numbers:

- Great number of interdisciplinary projects:
27 projects
 - Nice mix of student majors and home-departments:
ECE, ECE Indep. study, BME/ME, CBE, ME, VIP;
- Supervised by ECE and ME faculty, Industry mentors and EIRs!

2. Career Fair Dates

CSU Career Expo and Internship Fair 9/11 (and 9/12)
College of Engineering Career Fair: 10/3

3. E-mail

- CSU email will be used (sent this morning – have you received it?)
- The importance of a timely response

4. Project work ---> number of hours (applicable to students working on ECE projects)

hours / accomplishments / grades (ECE401 > 9, ECE402 > 10 hrs/wk lecture time should not be included)

5. Weekly Lectures (applicable to students registered for ECE401/402, only)

- Requirement: may miss 1 (no penalty); 2 (5point penalty); more than two- no credit!
- Email Hein in advance, if missing a lecture. Make up, approved by Hein, **within three days**
- Prepare
- Be on-time. 12:00 / 12:05 / 12:10 / 12:50 – 4:00 / additional class meetings
- Respect
- Don't just listen, try to get the message; Similar topics
- Ask questions
- Job opportunities

6. Design Notebook

- What should be in the Design Notebook?
- Electronic Notebook System with Team and Individual components / files

Team documents should be saved on a shared drive for all members to be able to access. Some of the required documents are:

- ❖ Product requirements
- ❖ Product specifications
- ❖ Budget
- ❖ Tasks and timeline
- ❖ Weekly team management table
- ❖ Shared team documents with revision control

Individual documents should be stored by each team member separately on their personal computer or drive:

- ❖ Time log: downloadable template has been provided on Canvas
- ❖ Individual notes – what should be in the Individual Notes “... *if it's not there – you did not do it...*”

7. Most important (general) dates

- 9/10 – team picture day (team)

- 9/10 – EIR Mentor request survey to be filled (team)
- 9/22, midnight – Websites fully posted
- 9/20 Project definition and specs review w/EIR Volunteers in B111 Lab
- Mid-September - EIR Mentor will be assigned
- 9/22, midnight – Project Plan due
- 9/22, midnight – Project websites should be “live” and approved by advisor or sponsor
- 10/1 – Preliminary Design Review w/EIR Mentor (form due date)
- Mid-semester (quick) peer review
- 10/27, 5 pm – DTVC (Design, Test, Validation and Classification) document due
- 12/4 – Mid-project Review w/EIR Mentor (form due date)
- 12/6 and 12/7, whole day in LSC – oral presentations (ppt slides)
- End of semester documents

8. Mid-semester self and peer evaluations:

Form to be filled-in, uploaded to Canvas and emailed to advisor; O. Notaros copied... (to be confirmed)

9. End of semester deliverables:

Oral presentation, written report (approved by the advisor before due date), Evaluation form (team, peer and self) and self-reflection

10. Required evaluations and team meetings:

- 9/20 Project definition and specs review w/EIR Volunteers in B111 Lab
- Preliminary Design Review (PDR) w/EIR mentor late-September
- Meeting with O. Notaros early October (20-30 minutes)
- Mid-Project Review w/EIR Mentor before oral presentations
- Oral presentations

11. Budget

- o Pre-approval: \$200 per senior design student regardless of major, per academic year for projects that have ECE as home department (ME/ECE projects and projects with industry sponsor – different!)
- o Talk to your ECE Faculty Advisor about using their P-card, or email Hein and Olivera if advisor is not able to use their P-Card

12. Mini grants / Awards

13. Grading

- o 60-70% project supervisor
- o Around 30% head of senior design
- o 10% peer evaluation

14. Be careful of the deadlines

15. Questions?

- B111 - ECE Student Projects Lab (24/7 access will be granted starting next week)
- B9
- EIR schedule and revised volunteer list should be posted by the end of next week
- On-campus EIR will commence mid-September. As of now, plan is to schedule EIRs on Tue Wed and Thu
- Contacting EIRs: EIR directory file and contact info on Canvas

All submitted documents must have the same formatting: font size 10 or 11, Times New Roman or similar, single spacing, 1” margins on all sides, justified (straight edges on both left and right sides).

B111 - ECE Student Projects Lab

RULES

B111 – ECE Student Projects Lab has (from front to back)

- EIR area (with limited office supplies)
- Seating set
- Kitchen area (microwave, coffee maker, two fridges, water heater and other electrical conveniences); last year students have started the take-one-leave-one donations food supply
- 3+3 lab benches with desktop computers and full test equipment setup (similar to the old C105/C107)
- Free area, stocked with circuit components, switches, sensors, stripped wire and internal power supplies - all donated and available for students to take/use for their projects (please use common sense when taking and always ask if not sure)
- Creation area with five 3D printers, 2 CNC machines, reflow oven, soldering stations with IR preheaters, heat guns, tabletop drill and tool chest stocked with tools (please return where found!), 3D scanner, trinoculars, coil winder; and 150W laser cutter...
- Four cubicles (meeting rooms)
- Multiple drawers and shelf space for teams to store their projects. There is no option to lock your supplies. You may claim any storage space labeled as “AVAILABLE” – just flip the sign and write your project name.

Space in the lab is very limited, since we expect almost 100 senior design and close to 30 OOP and VIP students working on more than 40 projects to claim their space in this lab. Therefore we kindly ask that students work in supervisor's lab, if at all possible, especially projects originated/proposed by CSU professors.

1. Respect your and other projects – **keep the door closed at all times!**
2. **24/7 access** will be granted to
 - ECE senior design students
 - BME, CBE and ME students working on ECE senior design projects
 - Independent Study students working on ECE senior design projects, regardless of their major
 - OOP students (Sec.1 and Sec.2)
3. B111 should be used for senior design-related work. Work related to other courses is acceptable, as long as there is enough space for those doing project work
4. Responsible consumption of food and beverage is allowed, as long as food and beverage containers
 - Are not kept on **any** benches with computers and test equipment
 - Are not kept in the Creation Lab area (with prototyping equipment and tools) or Soldering Area
 - Are disposed in the appropriate containers, and not left on benches. Please throw “smelly food” containers outside.

Consider this rule as a **huge** favor and privilege that may be **terminated** at any time if students do not follow rules.

Email questions, comments and suggestions to Olivera or ECE Student Projects Lab team!