ECE 4335: Capstone Design

Dr. Len Trombetta
(course coordinator)

Amanda Zabaneh
(undergraduate advisor)
UH ECE Capstone Design

- **Course Coordinator:**
  - Len Trombetta
    - ltrombetta@uh.edu
    - 713-743-4424
    - W324 D3

- **Spring 2022 Course Facilitators:**
  - Dr. Desiree Phillips
  - Dr. de la Rosa-Pohl
UH ECE Capstone Design

- Amanda Zabaneh
  - Undergraduate Advisor
  - ECE 4335 Enrollment Form
    - Degree plan confirmation
    - Advisement report instructions

**Prerequisites:**
- You must complete:
  - “Request to be Added to ECE 4335” form
    - if the information provided is complete and you are on track to graduate in two semesters, then...

- You will be:
  - added to the course automatically: you cannot register for 4335 yourself!
  - notified by the department when that happens
UH ECE Capstone Design

• **Prerequisites: (continued)**

• You must also:
  • attend a portion of the Capstone Design Conference presentations (details will be emailed at a later date).
  • Write a one-two paragraph review of three of the presentations.
UH ECE Capstone Design

• ECE 4335/4336 Class Organization and Meetings
• meet 10:00 – 11:30 am TTH (CBB)
  • In general, there will be three types of meetings:
    • **General Class Meetings:** Everyone attends general class meetings. These cover various topics of importance.
    • **Team meetings:** Teams will meet with the facilitator (course instructor), and with the project technical advisor as necessary.
    • **Oral Presentations by Teams:** Presentations will take place approximately every three weeks by cohort, and will be attended by all teams in the cohort.
UH ECE Capstone Design

- **Course Expectations**
  - project description
    - goals
    - schedule
    - budget
  - reports
    - everyone will make an oral presentation
    - everyone will make a written presentation
  - project *deliverable(s)*
Organization

- **Teams:** 3-4 students
  - You are encouraged to form teams before the semester starts.
- **Cohorts:** 4-5 teams with similar technical issues
- Assigned one or more of the following:
  - **Facilitator:** A course instructor who will provide overall guidance and handle administrative issues.
  - **IAB Mentor:** An Industry Advisory Board member will provide real-world advice
  - **Industry Engineer:** A technical contact who is familiar with your project. (for industry projects)
  - **Faculty Consultant:** A UH faculty member who is familiar with the project and grades assignments.
The Bottom Line...

- You and your team are responsible for your project and its success. You are expected to act professionally, which means...
  - You take your work seriously and do what is necessary to get the job done: no excuses.
  - You show up on time for class and meetings with your faculty/industry consultants.
  - You “pull your weight” on the team.
UH ECE Capstone Design

Where Do Projects Come From?

- Project Master List posting
- local industries
- students’ employers
  - if you are currently employed by a company that wishes to sponsor a project, please contact the facilitator for further instructions
- faculty
- engineering competitions
  - NASA
  - SparkFun
  - IEEE...
- students themselves
  - visit your instructors or Dr. Trombetta
Show me the Benjamins!

• **Where Does Money Come From?**
  - local industry sponsors
    - industry sponsors are asked to make purchases or provide equipment and supplies, and to make a donation to the Capstone design fund...
  - capstone design fund
    - make your own purchases and get reimbursed
    - get the department to buy it for you

• **Can the team pay for it?**
  - Sure.

• **Who keeps the project?**
  - Whoever paid for it.
Prerequisites...

- The prereqs for ECE 4335 are...
  - ECE 3440 (Numerical Methods) [EE only]
  - INDE 2333 (Engineering Statistics)
  - ECE 3355/3115 (Electronics)
  - ECE 3317 (EM Waves)
  - ECE 3446 (Microprocessor Systems)
ECE Capstone Website (new)!

https://www.ece.uh.edu/capstone-design
Questions?