

ME189 & ECE188/189: Week 5

Course Timeline

Week 1	Class	Fabricating and testing
Week 2	Website Content In	Fabricating and testing
Week 3		Fabricating and testing
Week 4		Fabricating and testing
Week 5	Class	Project completion Test Plan Final prototype 1 completed

Course Timeline

Write Paper, Design Poster, Design Presentation, Design Video

Week 6 Reworking prototype and testing

Week 7 Reworking prototype and testing

Week 8 **Project completion review**

Reworking prototype and testing

Week 9 **Project completion review**

Poster 1st Draft Due Tues 5pm

Poster reviews Wed 11am-3pm

Poster Final Draft Due Sat 5pm

Week 10

Video Due Monday 5pm

Showcase Presentation rehearsals Thurs 2-4pm

Engineering Design Expo (Edx 2018) Fri 12:30-5:15pm

Engineering Design Expo (EDx 2018)

- 6/8 from 2-5pm at Corwin Pavilion
 - Set-up, lunch, senior class photos 12:30-2pm
 - Poster/demo/judging session 2-4pm
 - Design Showcase (TED style talks) 4-5pm
- Open to the public
- Lots of potential employers
- Dress to impress



Design Competition

Competition Information

- Time/Date: Fri, June 8th from 2-4pm (Arrive at 12:30pm for lunch, set-up, class photos)
- Location: Corwin Pavilion
- Format: Each team will have a booth with electrical power access, table, and their poster. You will have a dedicated time to showcase your project to the judges (12 minutes per ECE team, 5 minutes per ME team). If possible, you should work a demo of your product into what you present. If applicable, you may have supplementary props and/or a laptop with pictures, images, videos, but **ABSOLUTELY NO SLIDES!** Judges will likely interrupt you with questions, so be prepared to think on your feet!
- Judging Criteria:
 1. Quality of the engineering work and of the resulting final product.
 2. How well were the goals of the project achieved?
 3. Quality of presentation / demonstration.

Competition Information

- Projects will be judged by a panel of faculty and industry judges
- There will be three separate competitions, each with 1-3 awards:
 - Mechanical Engineering (3 awards)
 - Excellence in Mechanical Engineering (includes \$2K prize)
 - Engineering Innovation in ME
 - Best Technical Project in ME
 - Electrical Engineering (2 awards)
 - Excellence in Electrical Engineering (includes \$2K prize)
 - Engineering Innovation in EE
 - Computer Engineering (2 awards, determined in CE morning talks)
 - Excellence in Computer Engineering (includes \$2K prize)
 - Engineering Innovation in CE

Poster Information / Overview

- Size: 36" x 48" (EE, CE, and Multidisciplinary), 30" x 40" (ME)
- Content: Refer to template and instructions. Note:
 - You may use provided template or come up with your own design
 - Must include (i) Team member names, (ii) Title, (iii) Your logo, (iv) Sponsor logo, (v) UCSB College of Engineering logo, and (vi) Acknowledgements
 - Background color cannot be black
 - Images must be at least 150dpi (preferably at least 300dpi)
- General Tips:
 - Use a minimum of text (bullet point descriptions are encouraged)
 - Make text large enough to be readable from a distance of 5 to 6 ft
 - Use graphs, charts, photographs, and illustrations as much as possible
 - Use graphics to communicate your points quickly and to demonstrate your work
 - Ideal poster will serve both as a stand-alone poster and as a reference for your presentation

Example only

Example only

Example only

Template to be posted

Insert project logo and tagline here

Insert Poster Title Here

Student #1 | Student #2 | Student #3 | Student #4 | Student #5

Background

Insert background info about your project, motivation, etc. Include a figure if applicable

Overview / Design Specs

Insert brief description of product, problems that it solves, bullet points of key features, etc

Exploded View / Block Diagram / Functional Flow Diagram

Insert Exploded View / Block Diagram / Functional Flow Diagram

Final Design / Product Name

Insert picture of final product

Caption and/or text (preferably bullet points)

Hardware / Key Components

Picture: Key Comp #1	<p style="text-align: center; font-size: 0.8em;">Label</p> <p style="font-size: 0.8em;">Describe key component #1, including applicable specs</p>
Picture: Key Comp #2	<p style="text-align: center; font-size: 0.8em;">Label</p> <p style="font-size: 0.8em;">Describe key component #2, including applicable specs</p>
Picture: Key Comp #3	<p style="text-align: center; font-size: 0.8em;">Label</p> <p style="font-size: 0.8em;">Describe key component #4, including applicable specs</p>

Key Result #1 (e.g., thermal test, drop test, etc)

Insert figure

Describe key result (consider bullet point list).

Key Result #2 / References / Conclusion

Insert figure

Describe key result (consider bullet point list).

Example only

Example only

Example only

Template to be posted

Poster Deadlines / Submission / Printing

- Tues 5/29 : Submit first draft by 5pm, share over Google Drive to capstone.ece188@gmail.com
- Wed 5/30: Poster reviews 11am-3pm
- Sat 6/2: Submit final draft by 5pm, share over Google Drive as above.
- Mon 6/4: All posters will be printed. Contact Ekta Prashnani (ektaprashnani@gmail.com) with questions
- Thurs 6/7: Practice/info sessions at Corwin Pavilion in the afternoon

Project Completion
Review / Customer
Review (Final
Presentation)

Project Completion Review

Content:

Tell us about your design

What motivated the design

Don't forget to include the design specifications which came from

Customer needs, Engineering Characteristics, competitive benchmarking

Show us the test results, how does your product stack up to the competition?

Get into the details of how your product works

Utilize video, pictures, diagrams

Design: Spend a few weeks really preparing for this review. Take pride in your story and design. Think about how to sell it!

Video due Mon June 4

30s Video specifics

To be shown in front of a crowd of 400-600 people

30 seconds max

Demonstrate your prototype working

Think of this as a commercial on television– sell us on your idea, why it's important

Condensed elevator pitch

Videos from last year: <https://youtu.be/pjy1Wf9vFUI?t=1139>

Optional but recommended

A feature length video about your project

Any length between 30s and 4 minutes

If you do not submit a feature length video, we'll use your 30s video

For the website, last year's setup here:

https://capstone.engineering.ucsb.edu/projects?title=&field_project_type_value=A&field_year_value%5Bvalue%5D%5Byear%5D=2017

Data Dump

Data Dump

Box folder to be set up for your to dump all CAD files and everything else for the sponsor / future use