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ENGR 40M: An Intro to Making: What is EE (Mark Horowitz)

Welcome to ENGR 40M!

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OAE:

If you have any an OAE letter please email it to Raina cc Mark on it please

Any other OAE related questions regarding please do the same and email her + cc me.

All labs take place in Packard 051.

<http://exploreddegrees.stanford.edu/>

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[accessibility](#)

Class Goals:

Class Goals (<https://canvas.stanford.edu/courses/213443/pages/class-goals>)

Prerequisites:

Class Prerequisites (<https://canvas.stanford.edu/courses/213443/pages/class-prerequisites>)

We are here to help:

Please reach out to Mark, Raina, or the TAs if you need extra help.

Course Reader:

Reading the course reader (<https://canvas.stanford.edu/courses/213443/files/15701413?verifier=YjVpyn4MNHngGJTTVuDTMfr82SCi9QiP0E5j2QlH&wrap=1>) is not mandatory, but it is a great resource for understanding more fast-paced or confusing lecture topics, as well as for finding additional practice problems.

Labs Kits:

All labs will be in-person, in our lab in Packard 051. Each of you will be getting a lab kit that contains the parts you will need for the quarter. The kits cost around \$100, so please don't lose yours. We will distribute lab kits at the beginning of your first lab. Labs will begin during week 2.

NOTE: If you decide to drop the class and already picked up the lab kit, you must return the lab kit by contacting Raina (rainas@stanford.edu (mailto:rainas@stanford.edu)). We accept opened and partially used lab kits, so even if you used it for a lab or two we still want you to return them.

Labs Sign Up:

Each of you will sign up for a 3 hour lab period. The lab timing will be spread throughout the week, so we hope there will be a good time period for everyone. Lab sign ups will open on Thursday of Week 1 via Canvas. Labs will be capped at 12 students per TA (2 TA sections are capped at 24 students) and it will be first-come-first-served for times. Because of that, if you need particular times, please be sure to sign up ASAP. To sign up, please go to 'People > Labs'. **We will send out an announcement when lab sign ups are opened.**

Lab times and logistics (including action items for you to request building access) are available here: Lab Logistics (<https://canvas.stanford.edu/courses/213443/pages/lab-logistics>)

Lectures:

We usually run this class in a flipped format. The traditional class lectures have been broken into a number of short video segments, each focusing on one concept. The material is also presented in a reader, so you can either read the reader, watch the videos, or do both. To make sure you are tracking the class material in real time, after reading/watching the lecture material, you must complete the Canvas exercise to check your understanding of the concept. If students want live lectures, and promise to attend lectures, I will un flip the class.

In class time (**MWF 3pm-4:20 pm in Hewlett 201**) will consist of two segments. The first 15ish mins will

be answering questions you have about the lecture material. The rest of the time will be spent working with each other (and the teaching staff) to solve problems. We will tackle a different group of problems each day:

Monday: Concepts and worksheet with former exam problems to help practice the material and prepare for exams.

Wednesday: The current week's homework.

Friday: The following week's prelab.

You will work on these problems with fellow students. Mark, Raina and the TAs will be there to help and answer questions. Showing up to class is the best way to learn the material and it is highly encouraged.

Please show up for the first day of class!

Weekly Overview:

- Work through the lecture material via the Modules Tab.
- Attend class (3x/week)(MWF)
- Attend your lab section (1x/week)
- Turn in weekly homework (Due Fridays at 11:59pm on Gradescope)

Before Class:

- Watch the videos (or read the lecture notes).
- Do the Canvas Exercises.

Before Your Lab Period:

- Read the entire lab handout.
- Complete the prelab in the lab handout (due 24 hrs before the **start** of your lab section on Gradescope).

During/After Lab:

- Complete the lab following the handout. The construction guides are useful tool as well.
- Complete all measurements and questions in lab handout (due on Gradescope 6 days after lab, i.e., 24 hours before the **start** of your next lab section)
- Present completed lab to TA in person or via video for completion and build quality grade (due in following lab)

Quarter Overview:

Week	Dates	Lab	Problem Set Release Date	Problem Set Due Date
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Week 1	Sept 22-26		PSET 1 Release- Friday	
Week 2	Sept 29- Oct 3	Lab 0	PSET 2 Release- Friday	PSET 1 Due- Friday
Week 3	Oct 6-Oct 10	Lab 1	PSET 3 Release- Friday	PSET 2 Due- Friday
Week 4	Oct 13-Oct 17	Lab 2A	PSET 4 Release- Friday	PSET 3 Due- Friday
Week 5	Oct 20- Oct 24	Midterm Week (Midterm Friday)	PSET 5 Release- Friday	PSET 4 Due- Wednesday
Week 6	Oct 27-Oct 31	Lab 2B	PSET 6 Release- Friday	PSET 5 Due- Wednesday
Week 7	Nov 3-Nov 7	Lab 3A	PSET 7 Release- Friday	PSET 6 Due- Friday
Week 8	Nov 10-14	Lab 3B	PSET 8 Release- Friday	PSET 7 Due- Friday
Week 9	Nov 17-21	Lab 4A	PSET 9 Release- Friday	PSET 8 Due- Friday
Week 10	Dec 1-5	Lab 4B		PSET 9 Due- Friday
Final	Dec 9	Final	Tuesday 9:30 - 11:30am.	Hewlett 200

Weekly Schedule:

	Monday			Tuesday			Wednesday			Thursday			Friday		
	CLASS	LAB	OFFICE HOUR	CLASS	LAB	OFFICE HOUR	CLASS	LAB	OFFICE HOUR	CLASS	LAB	OFFICE HOUR	CLASS	LAB	OFFICE HOUR
8:00 AM															
9:00 AM					Lab OH: Andrea 9am			Lab: Ashley 9am	Class OH: Eddie 9am		Lab: Victor 9am			Lab: Naomi 9am	
10:00 AM		Lab OH: Allen 10am													
11:00 AM		Lab OH: Andrea 11am	Class OH: Ashley 11pm												Class OH: Kailana 11am
12:00 PM								Lab: Matthew & Myles 12pm						Lab: Raina 12pm	
1:00 PM					Lab: Eddie 1pm						Lab: Bryan & Kailana 12:30pm				Class OH: Bryan 2pm
2:00 PM						Class OH: Vincent 3pm	Class 3pm						Class 3pm		
3:00 PM	Class 3pm														
4:00 PM			Class OH: Prof. Horowitz 4:30pm		Lab: Vincent 4pm				Class OH: Prof. Horowitz 4:30pm		Lab OH: Matthew 4pm				Class OH: Prof. Horowitz 4:30pm
5:00 PM								Lab: Naomi 5pm	Class OH: Ronny 6pm						Class OH: Victor 6pm
6:00 PM											Lab OH: Myles 6pm				
7:00 PM		Lab OH: Naomi 6:30 pm			Lab: Allen 7pm						Lab: Andrea 6pm				
8:00 PM															
9:00 PM															

Labs and Lab OHs will be held in Packard 051, Class OHs will be held in Packard 055.

Class Resources:

Teaching Staff (<https://canvas.stanford.edu/courses/213443/pages/teaching-staff>)

Office Hours (<https://canvas.stanford.edu/courses/213443/pages/office-hour-times>)

Lab Logistics (<https://canvas.stanford.edu/courses/213443/pages/lab-logistics>)

Grades (<https://canvas.stanford.edu/courses/213443/pages/grades>)

(<https://canvas.stanford.edu/courses/213443/pages/grades>)Late Policy (<https://canvas.stanford.edu/courses/213443/pages/late-policy>)

Arduino Guide (<https://canvas.stanford.edu/courses/213443/pages/arduino-download-+-guide>)

Soldering Tutorials (<https://canvas.stanford.edu/courses/213443/pages/soldering-tutorials>)

Online Resources:

Gradescope

EveryCircuit (<https://canvas.stanford.edu/courses/213443/pages/everycircuit>)

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