

Engineering vs Engineering Technology

- Great deal of overlap
- Both focus on practical applications
- Engineering Technology: Emphasize the application of engineering techniques
- Engineering: Emphasize on the development of theoretical concepts

Math Skills will help you to be successful



What does an Engineering Technologist do?





What does an Engineering Technologist do?

Engineering Technologist: practical application of science and engineering to solve a wide range of complex technical and operational problems.



Engineering Technology: Programs

Facilities Engineering Technology (FET)

> ABET Accredited Program

Marine Engineering Technology (MET)

- ABET Accredited Program
- USCG Certified Program



Engineering Technology Program at Cal Maritime – WHY?

- MET and FET programs
 - Preparation for wide range of industries
 - High paid salaries
 - Preparation for master's and doctoral programs
- Overall <u>cadet</u> experience enhanced job prospects
 - Academics theory and laboratory experience
 - Leadership experience



Electronics/Motors **Projects** Prof. Evan Chang-Siu (Associate Professor)



Machine Shop by Steffan Long (Instructor)

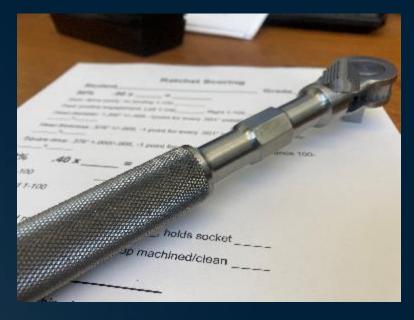






DELIVERABLES







EPO 315 – Manufacturing Processes

Socket Wrench



Makerspace by Ms. Erin Cole Instructional Support (IS) and Makerspace Technician ecole@csum.edu



Contacts

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Makerspace

Ms. Erin Cole, Instructional Support (IS) and Makerspace Technician ecole@csum.edu







Tools

- 3D printers
- Sewing & embroidery machines
- Laser cutter
- Soldering supplies
- Misc. hand tools
- PCB mill
- Vinyl cutter
- Basic prototyping supplies

Trainings

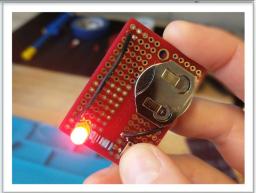
Current:

- 3D printers
- Soldering
- Sewing machine
- Laser cutter

Coming Soon:

- PCB mill
- Embroidery machine
- Vinyl Cutter

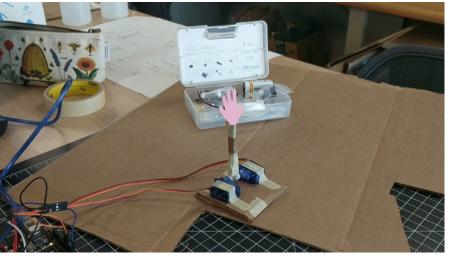


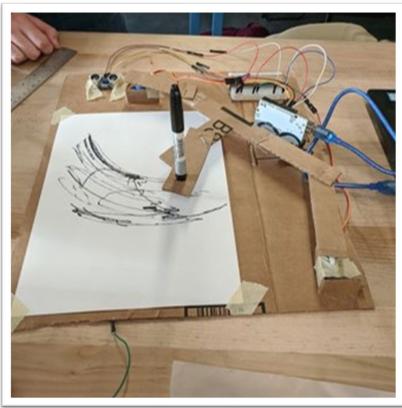


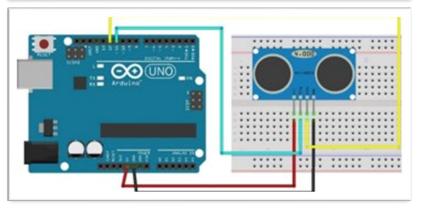
ET Support

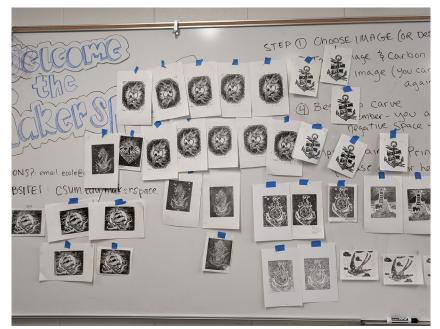
- Ender 3 printer check out
- Arduino & circuit assistance
- Fabrication
- Video tutorials









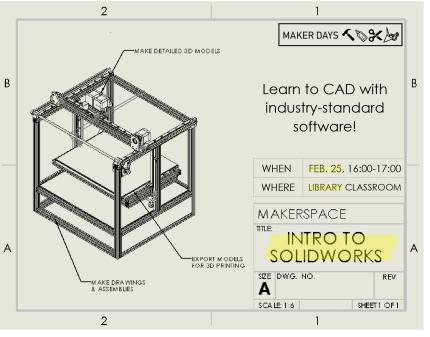












Student Projects in Engineering Technology

April 22nd 2021

Evan Chang-Siu, PhD

Assistant Professor Engineering Technology

Scope of Projects

- Semester Long Projects
- Electronics: Arduino based sensing/actuation
- Electrical Machinery: Electrical Motor/Generator







ET 350 Competitions

