Mechanical Engineering Program

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Introduction

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Overview

• Introduction
• Senior Capstone Projects
• Summer Experiences
• Makerspace
• Machine Shop
• Student Perspectives
Why Choose the Cal Maritime ME Program?

- Small size & personal connections
- Undergraduate teaching focused
- Hands on practical and system level experiences
- Preparation for the engineering workplace
- Ranked #3 in 2020 Best Colleges for Mechanical Engineering by gradreports.com
Senior Capstone Projects

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Senior Capstone Project – SAE Baja
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Senior Capstone Project –
DoE Collegiate Wind Competition
Senior Capstone Project –
DoE Collegiate Wind Competition
Senior Capstone Project – SMUD Solar Regatta
Senior Capstone Project – Prosthetic Hand
Summer Experiences

Robert Blomberg, Senior, License Option
Gillian Hooper, Senior, General Option
John Van Dixhorn, Senior, General Option
CRU 150: Sea Training I

• Freshman Summer aboard Training Ship Golden Bear
Sophomore and Junior Summer Experience

License Option

• USCG 3rd Assistant Engineer License + BS Mechanical Eng.
  • Commercial Cruise
  • 2nd Training Cruise aboard TS Golden Bear

General Option

• BS Mechanical Eng. w/ Emphasis in Energy or Mechanical Design
  • Sophomore & Junior Summer Co-ops (Internships)
Makerspace

Mx. Erin Cole, Instructional Support (IS) and Makerspace Technician

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What is the Makerspace?

- Free resource for working on projects
- A place for creativity!
- Tools, trainings, & events
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
Machine Shop

Dr. Tomas Oppenheim, Assistant Professor
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Machine Shop
Welding Shop
Machine Shop
Student Perspectives

Robert Blomberg, Senior, License Option
Gillian Hooper, Senior, General Option
John Van Dixhorn, Senior, General Option
Conclusion
Challenging but Worthwhile Program

• Small campus in the CSU System
• ME degree plus real world engineering experience
• Corps and leadership development
Questions

• Department Chair
  • Nader Bagheri, nbagheri@csum.edu

• ME Faculty
  • Tomas Oppenheim, toppenheim@csum.edu
  • William Tsai (Co-op Coordinator) wtsai@csum.edu

• Makerspace
  • Erin Cole, ecole@csum.edu

• University Advisor
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