

CAL MARITIME

**ET PREVIEW DAY
2020**

**ENGINEERING
TECHNOLOGY**

Engineering vs Engineering Technology

- Overlap – Fundamental engineering courses
- Both focus on practical applications
- Engineering Technology: Emphasize the application of engineering techniques
- Engineering: Focus on the development of theoretical concepts

Misconception: No need of math skills to be successful in Engineering Technology

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
- STCW Certified Program

Engineering Technology: Curriculum

Academic Classes and Labs

Chemistry (lecture and lab)
Physics I (lecture and lab) and II (lecture and lab)
Calculus I and II
Speech Communication
Critical Thinking
Advanced Writing
Humanities (LD and UD)
Social Sciences (LD and UD)
Engineering Graphics
Welding
Manufacturing Processes I and II
Boilers
Turbines
Statics
Dynamics
Thermodynamics
Strength of Materials
Properties of Materials (lecture and lab)
Fluids (lecture and lab)
Circuits (lecture and lab)
Electronics (lecture and lab)
Motors (lecture and lab)
Engineering Management
Refrigeration and A/C (lecture and lab)
Instrumentation (lecture and lab)
Automation (lecture and lab)
Power Engineering (lecture and lab)
Naval Architecture

Shipboard and Simulation

Plant Operations I, II, and III
Fire Fighting
Intro to Marine Engineering
(lecture and lab)
Steam Plant
Systems/Simulator Class
Steam Plant Watch Team
Diesel Engineering I and
II/Simulator Class (only
MET)
Sea Training I, II (only MET),
and III (only MET)
Shipboard Medical (only
MET)

Facilities Engineering Classes

Intro to Power Generation
Plants
HVAC (lecture and lab)
Facilities Engineering
Diagnostics Lab
Facilities Management

**Great deal of overlap between the two programs
(MET and FET)**



Engineering Technology: Faculty

Committed with diverse backgrounds

ACADEMIC

Jonathan Fischer
Mike Strange
Mike Kazek
Dinesh Pinisetty
Evan Chang-Siu
Ryan Storz
Tom Clyatt

LICENSED

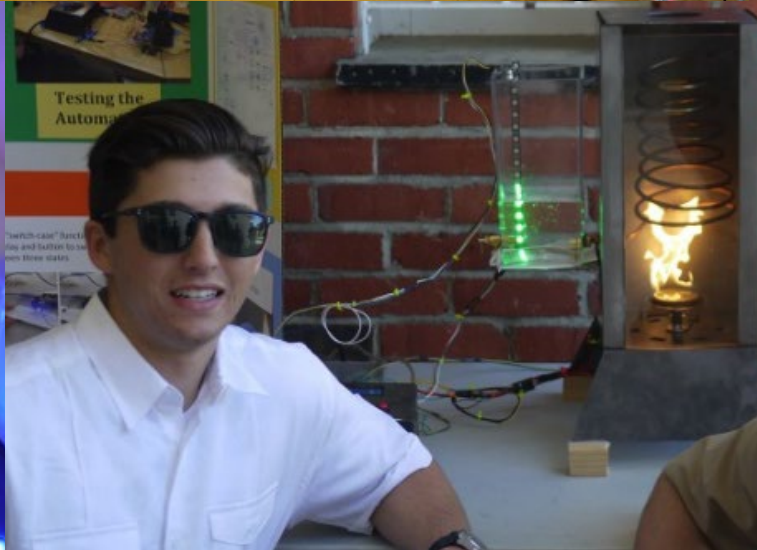
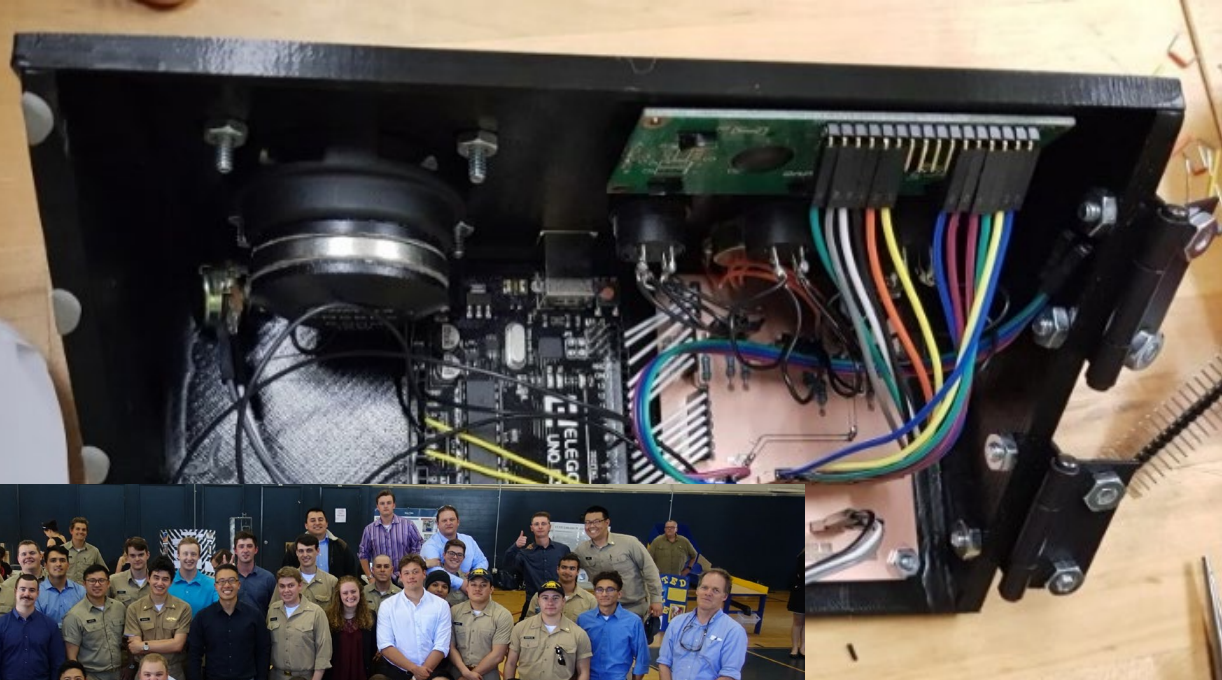
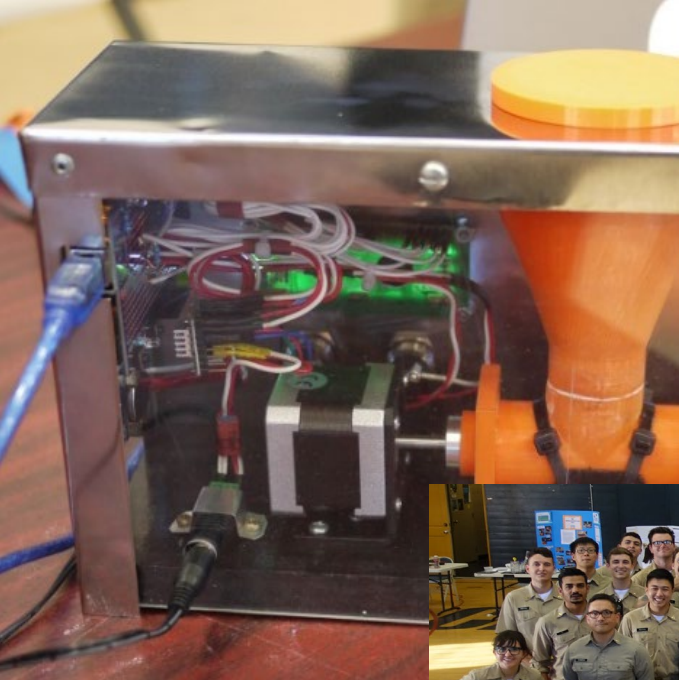
Scott Green
Steve Kreta
Keir Moorhead
Ken Levan
Brian Crawford
David Satterwhite

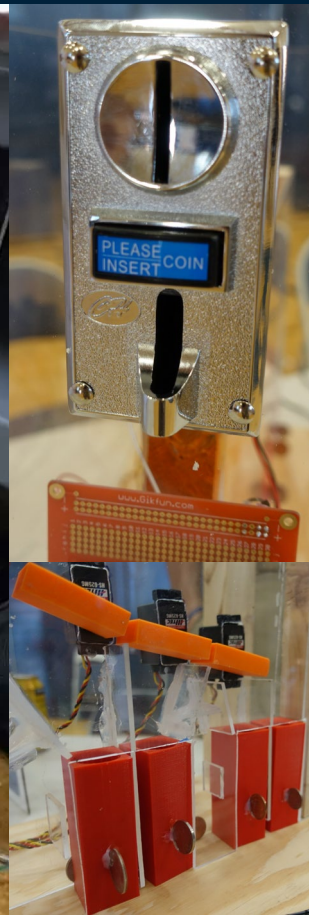
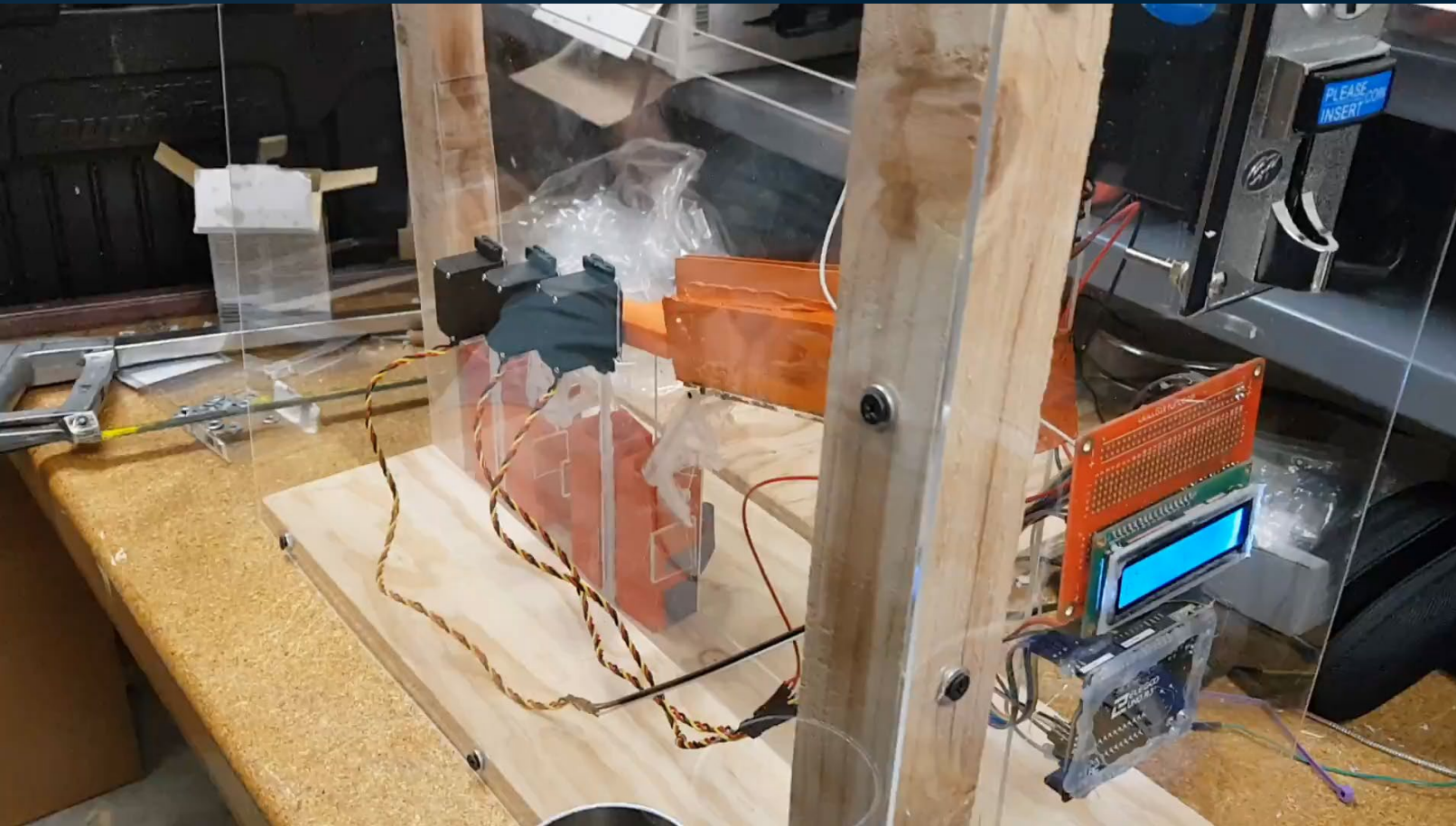
MACHINE SHOP/WELDING

Steffan Long
David Grover
Robert Smith (Staff)

OTHER FACULTY

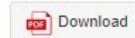
Neal Handly
Jack Gillespie





Electronic Connect Four (arduino)

By whelanjack11 in Circuits > Arduino 2,186 24 1 Featured

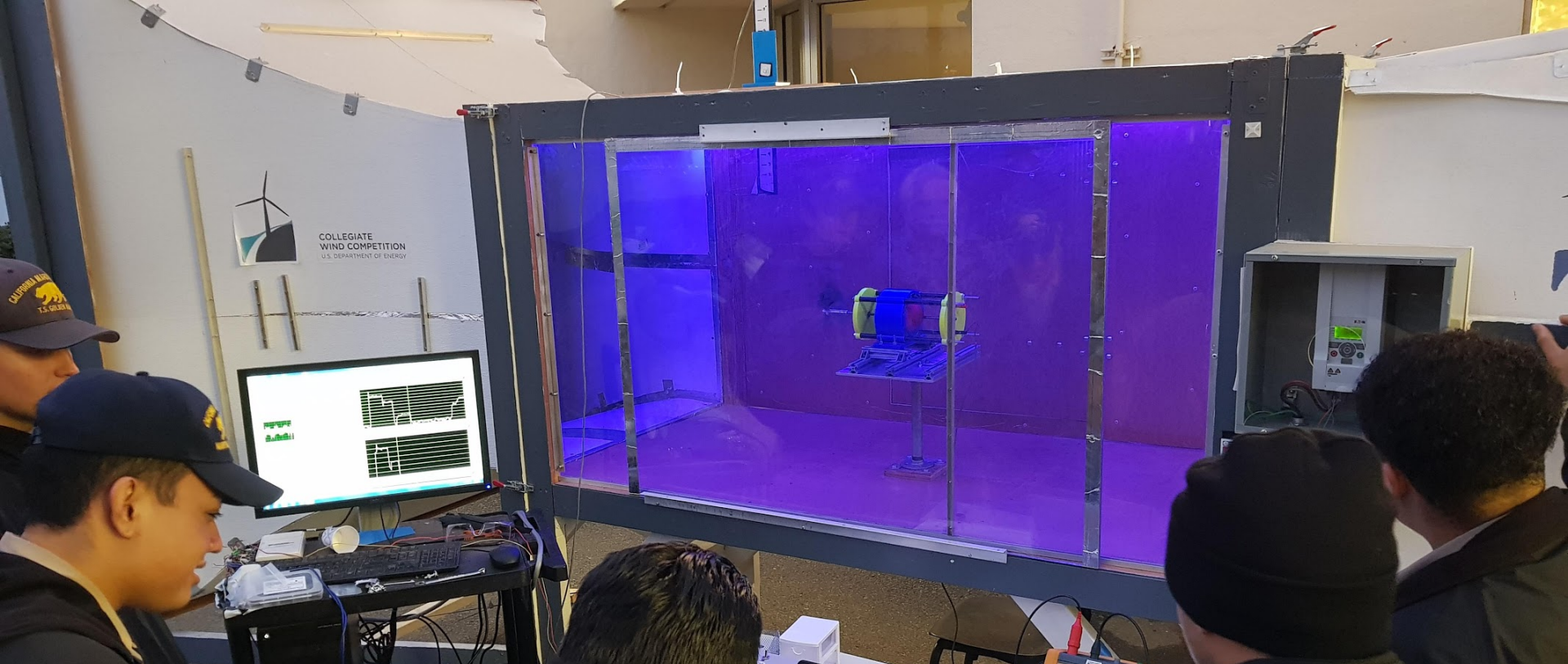


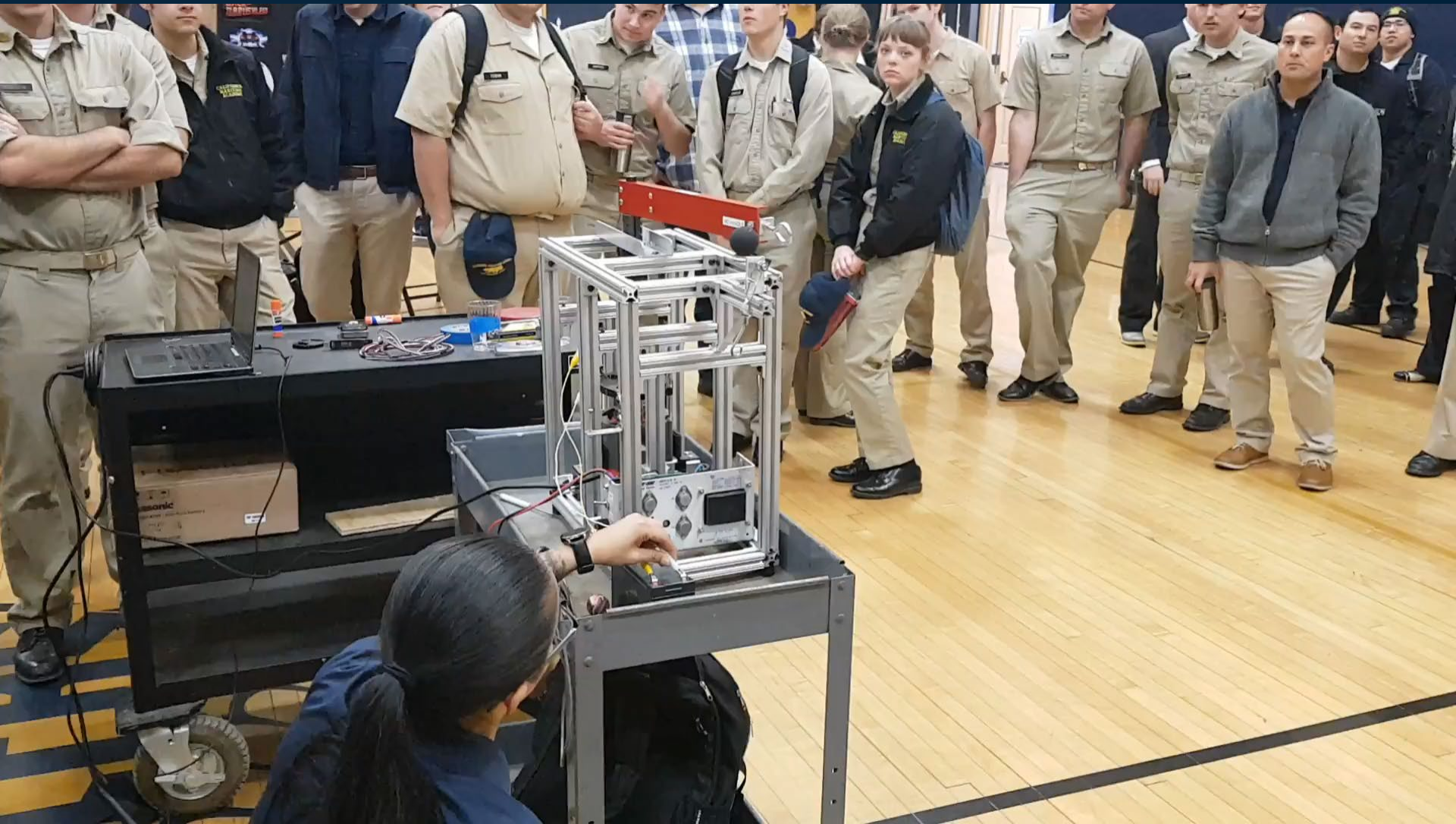
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MARITIME







Example Maritime Classes

- Steam Sim
- Cruise





Marine Engineering Technology

- Marine Engineers: Commercial and Government Vessels
 - ✓ Operation, oversee repairs, installation and testing of marine equipment
 - ✓ Conduct performance, operational and environmental tests
 - ✓ Ensuring equipment and machinery is in compliance with standards

- Benefits

- ✓ Range of Opportunities (shore-side and marine-based)
- ✓ High salaries
- ✓ In-Demand Career
- ✓ Adventure / Travel
- ✓ Value-added: USCG License →

- Desirable Characteristics – *Do you have what it takes?*

- ✓ Strong work ethic
- ✓ Equally strong working independently as well as in a team
- ✓ Desire to learn

***3rd Assistant Engineer
License is mandatory to
graduate with
MET Degree***

Facilities Engineering Technology

Facilities Engineers:

Work in several environments

- ✓ manufacturing facilities
- ✓ hospitals
- ✓ office buildings
- ✓ power generation plants
- ✓ biomedical

Average Starting Salary Estimates

- ❖ FET : \$80K
- ❖ MET: \$99K

~>90% Placement Rate

Engineering Technology – Who's Who

- **Engineering Technology**
Dinesh Pinisetty, Department Chair
- **Marine Engineering Technology**
Keir Moorhead, Program Coordinator
- **Facilities Engineering Technology**
Ryan Storz, Program Coordinator
- **Licensing Program**
Michael Kazek, Program Coordinator

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