Program and Project Description

Energize Colleges supports a network of California colleges and universities to advance energy and sustainability education and workforce development through experiential learning.

**Project 1: Waste Handling Assessment and Improvement Project**
Aimed to improve waste management and sorting within the Science and Engineering Building 2 on the UC Merced Campus. Turned into a proposal guiding custodial staff and UCM Recycle staff to make improvements.

**Project 2: Sustainable Vehicle Project (2x)**
Aimed to design an electric motor that will optimize battery life and efficiency. 1.) Created a state space model for the system and find the control variables. 2.) Focus on programming the controller that will control the motor.

**Project 3: Campus Kitchens Project**
Aimed to design and implementation plan for a Campus Kitchens at UC Merced. Proposal focused on the necessity of a Kitchen based on UC Merced Food Waste Data.

**Project 4: Hydroelectric Power Project**
Aimed to research the current state of hydroelectric power in the state of California and its future. Hydroelectric power could decline in coming years.

Credits: Images Courtesy of UC Merced Student Interns

Achievements

**Achievements:**
- Managed 5 interns over five projects with varying independent tasks and scopes
- Approximately 400+ hours dedicated to sustainability internships
- Engaged with approximately 185 High School students
- 3 document proposals for sustainability internships that can be continued through more research and guidance.
- Sustainability Showcase where students presented their work to their colleagues, faculty, and staff
- The continuation of the Energize Colleges Program into the following year

Lessons Learned / Fellow Experience

**Successful Strategies:**
- Persistence is necessary
- Outreach to those that you think may not be involved may surprise you
- Clear communication with both interns and advisors will allow for an improved intern experience
- Each student is different at learning and executing tasks, so ensure you build a relationship they are comfortable with

**Recommendations for Improvement / Program Expansion:**
- Portal dedicated for interns
- Improvement of tracking documents
- Earlier entry into the program to allow for internship initiation and execution

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