

NSF Research Experiences for Undergraduates (REU) Summer 2013 – Research in Advanced Propulsion and Fuel Technology for Sustainable Transportation

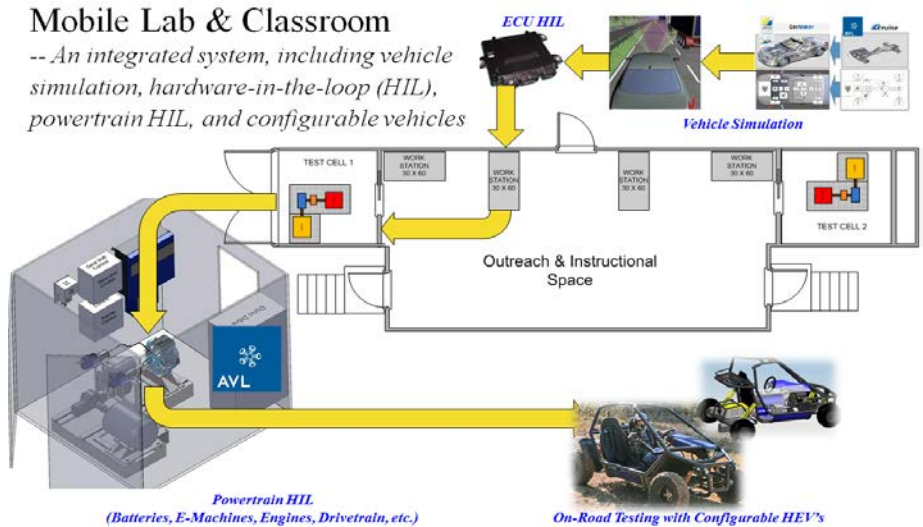
Project Overview

The NSF REU Site at Michigan Technological University provides the opportunity for **ten undergraduate students** per year to participate in interdisciplinary research related to **Advanced Propulsion and Fuel Technology for Sustainable Transportation**. During a 10-week summer session, REU participants will work closely with faculty and graduate student mentors **while involved in ongoing research at the Advanced Power Systems Research Center (APSRC), including engine and vehicle controls, renewable fuels for transportation, and the optimization of hybrid electric vehicles.**

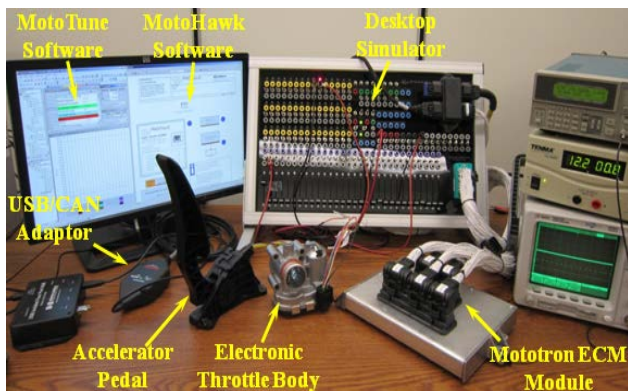
Students involved in the program will conduct research with faculty and graduate students. There will be time set aside for seminars and social activities. Each participant will have the opportunity to present the results of their research at a poster session at the end of the summer program.

Highlights

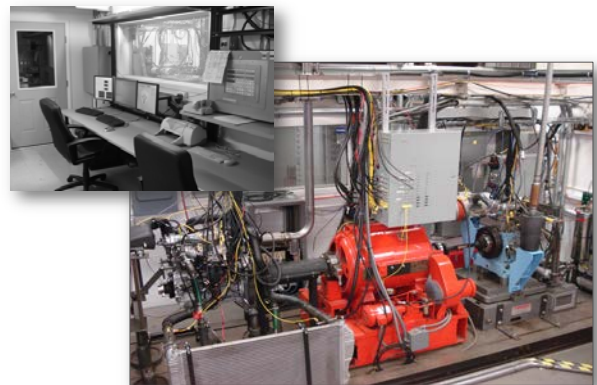
- 10 week research experience
(June 10 – August 16)
- \$400 per week stipend
- up to \$500 travel reimbursement
- room and board in university residence halls provided
- research with faculty and graduate student mentors
- hands-on-learning of interdisciplinary concepts
- communication skill practice



Research project: modeling, simulation, hardware-in-the-loop testing of hybrid electric vehicles



Research project: automotive embedded control systems



Research project: engine and renewable fuels for transportation

Application Form

REU Site: Research in Advanced Propulsion and Fuel Technology for Sustainable Transportation

(June 10, 2013 – August 16, 2013)

Name: _____

First Name

Middle Name

Last Name

Email Addresses: _____

(Please provide two email addresses)

University/College: _____

Major(s): _____ Minor(s): _____

Current Cumulative GPA: _____ Sex: _____

Class Standing (as of **June 10, 2013**): Freshman/Sophomore/Junior/Senior (circle one)

Citizenship: _____

(Only US citizens or permanent residents are eligible for this program)

Mailing Address: _____

Home Phone: _____ Cell Phone: _____

Eligibility

- Must be a citizen or permanent resident of the United States.
- Must have an overall GPA of 3.0 or above.
- Must be undergraduates with a major in Mechanical Engineering, Electrical and Computer Engineering, Civil & Environmental Engineering, or a closely related major.

I agree to all of the following to participate in the REU in Advanced Propulsion and Fuel Technology

1. Write one page of research statement.
2. One recommendation letter from professor in your department. Send sealed letters (signature on the sealed part) with your application package.
3. Attach official transcripts from your university and college studies.
4. Consent to the release of my photograph for publication.
5. Consent to use of my written work for project evaluation.
6. Commit to participate in assessment activities at both the Michigan Tech REU Site and home institutions after participating in the REU program.

Signature _____

Date _____

Return your completed application by **April 15, 2013**.

To:

Tina Sarazin
REU Program Coordinator
Mechanical Engineering - Engineering Mechanics
Michigan Technological University
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Houghton, MI 49931-1295
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Applicants will be notified of selection by **May 10, 2013**.

