

Research and Funding

Student Requirements

- Research hours are determined by each faculty mentor (at least 40 hour/week)
- Students will be required to give brief presentations on their respective research project during the course of the ten-week period.
- Students will be required to prepare an abstract, final paper, and a poster describing his/her research results.

Funding

- Each participant will receive a stipend of \$5,000 for the 10-week program, paid in two installments with one given at the beginning of the program and the second after successful completion of the program.
- On-campus housing expenses will be covered. Students choosing to live off-campus may receive monthly assistance for rent.
- Travel expenses up to \$400 will be provided for those participants traveling from out of state to attend the program.
- Program will cover tuition and fees for summer admission of one hour of research.



AEROSPACE ENGINEERING
TEXAS A&M UNIVERSITY



How Can I Apply?

Application Process

To participate in the program, the student must:

- Have a desire to participate in aerospace engineering-related research
- Plan to graduate no sooner than December 2013
- For any math, physics or engineering curriculum
- Have a cumulative minimum GPA higher than 3.25
- Cannot be enrolled in any additional academic courses over the duration of the summer work

Deadlines

Application Due:

February 28, 2013 (5:00 pm CST)

Program Participants Notified:

March 31, 2013

Program Dates:

June 3 - August 9, 2013 (10-week duration)

This program involves undergraduate students from TAMU as well as students from other colleges and universities.

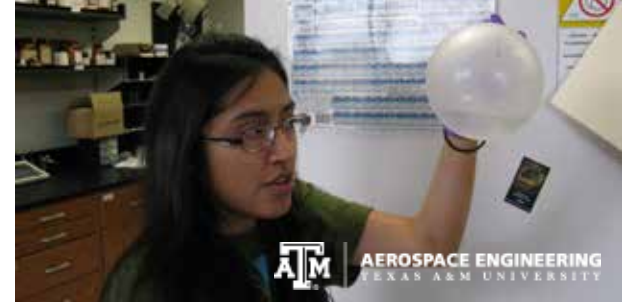
The application and further information can be found at:
<https://aero.tamu.edu/research/undergraduate/reu>

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REU



Research Experience for Undergraduates

**National Science
Foundation (NSF)
Research Experience for
Undergraduates (REU)
Site: AERO-U:
Aerospace Engineering
Research Opportunities
for Undergraduates**



What is the REU?

- Stands for: the Research Experience for Undergraduates
- Which is: A summer research program for students to conduct research in a hands-on environment with faculty, graduate students, and other undergraduates.
- Funded by: the National Science Foundation (NSF)
- Supported by: the department of Aerospace Engineering at Texas A&M University (TAMU).
- Focus on: advancement of materials science research for aerospace applications.

Who Can Apply?

Eligibility

To participate in the program, the student must:

- Have a desire to participate in materials science-related research
- Plan to graduate no sooner than December 2013
 - For any math, physics or engineering curriculum
- Have a cumulative minimum GPA higher than 3.25.
- Cannot be enrolled in any additional academic courses over the duration of the summer work
 - REU student will enroll in a 1-hour research workshop as part of the program

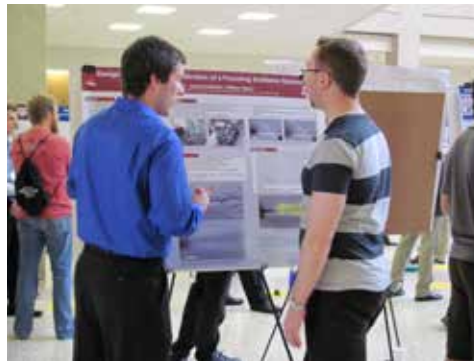
What Can I Do?

Participate in aero-propulsion fluids, materials, aerospace vehicle dynamics and controls research through computational and experimental activities. As a participant in the REU program, you will make significant contributions to on-going faculty research and, more importantly, gain an appreciation for and an interest in graduate school and a future research career. Your hands-on work will lead to an expanded knowledge of:

- multi-scale fabrication
- material property characterization
- modeling and simulation of structural actuation and sensing components
- cutting edge research in hypersonic and plasma flow modeling
- testing un-inhabited aerospace vehicles, including helicopters, spacecrafts and clusters of vehicles

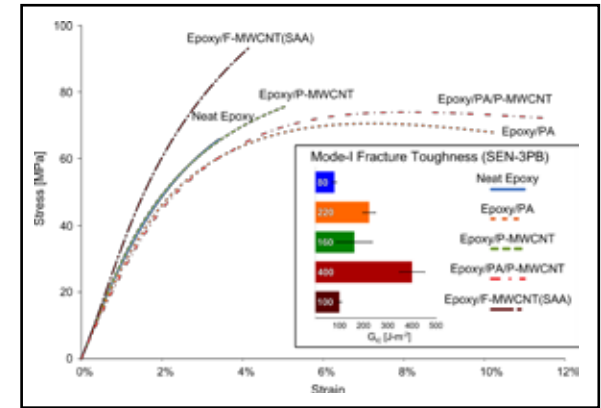
Enrollment in the REU program may take you on trips to some research facilities in the U.S. and right here at TAMU:

- NASA Johnson Space Center (Houston, TX)
- Vehicle Systems and Control Laboratory
- Immersive Visualization Center



Ongoing Research

The engineering skills you develop in your classes will be put to use in an actual research environment, an invaluable experience for students wishing to enter into graduate school or a career in research. Here are some examples of research developments from previous years' programs:



Using nanoparticles to specifically tailor the transport properties without deleterious impact on temperature-stability or mechanical properties associated with other approaches.



Modeling wing structures using finite element analysis, verified through experimentation.