



Connecticut Space Grant Consortium

2016 Space Grant Regional Meeting - Northeast
New York City
October 6-7, 2016

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<http://ctspacegrant.org>



AFFILIATES

Colleges and Universities:

- University of Hartford (Lead Institution)
- Central Connecticut State University
- Eastern Connecticut State University
- Fairfield University
- Southern Connecticut State University
- Trinity College
- University of Bridgeport
- University of Connecticut
- University of New Haven
- Wesleyan University
- Yale University

Community Colleges

- Asnuntuck Community College
- Capital Community College
- Gateway Community College
- Housatonic Community College
- Manchester Community College
- Middlesex Community College
- Naugatuck Valley Community College
- Northwestern Connecticut Community College
- Norwalk Community College
- Quinebaug Valley Community College
- Three Rivers Community College
- Tunxis Community College

COMMUNITY COLLEGE QUADCOPTER CHALLENGE (NEW)

- Community college students, in collaboration with a faculty advisor, use a quadcopter in a competition/challenge between teams of students.
- Each team is required to significantly modify their quadcopter kits in order to mount sensors, actuators, and electronics necessary for the challenge.
- Each team must ensure diversity
- All team members must learn to fly

This program is designed to:

1. increase the number of community college students who graduate with STEM degrees and/or transfer to STEM programs at four year institutions,
2. increase the ability of community college faculty members to deliver aerospace/aeronautical related content in areas of interest to NASA, and
3. enhance the diversity of students pursuing STEM education at Connecticut community colleges.

<http://www.courant.com/hc-community-college-quadcopter-20160513-premiumvideo.html> (hartford courant video)

<https://twitter.com/kennynien/status/73119590467438592>



UNDERGRADUATE FACULTY-STUDENT SUMMER RESEARCH GRANT (NEW)

Objective: to enable undergraduate students (4-year institution and community college) to gain meaningful research experience in NASA CTSGC affiliate research laboratories.

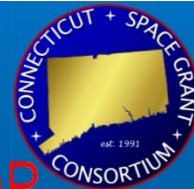
- The research activity should be consistent with the mission of NASA.
- The award is to support two undergraduate students:
 - 1 from a 4-year institution and
 - the other from a community college
- summer stipend for the students
- small stipend for the faculty advisor
- The research project should span a minimum of 8-weeks in length.
- The Primary Investigator for all Student-Faculty Summer Research grants is the faculty member.





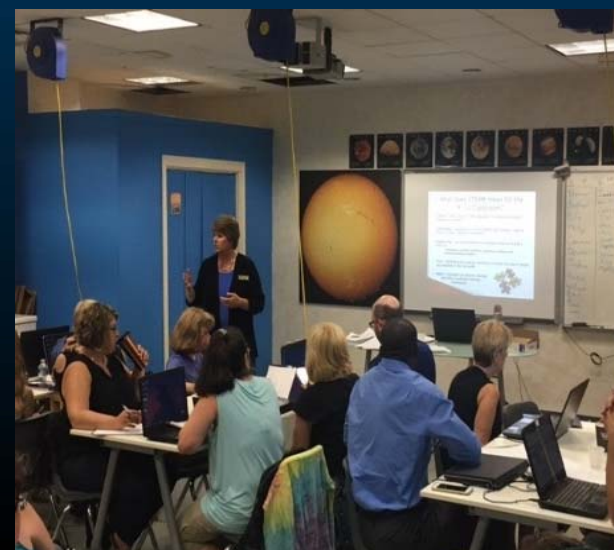
NEXT GENERATION SCIENCE STANDARDS (NGSS) WORKSHOP

- Three professors from Mathematics, Education, and Engineering from the University of Bridgeport developed and facilitated NGSS K-12 Engineering Design and Earth and Space Science Workshop
- held at the **University of Hartford and the Discovery Museum and Planetarium** in August.
- was offered to K-12 teachers throughout the state, with a primary focus on teachers who work in the cities of Bridgeport and Hartford.
- Teachers were provided professional development on the newly adopted NGSS as well as ways to incorporate engineering design into their science curriculum.
- Some topics/activities included: Navigating and Implementing the NGSS, Differences Between Science and Engineering, How to Craft Engineering Design Lessons, Building and Testing a Dust Sensor, Parachuting Onto Mars, Keeping our Astronauts Healthy: The Science and Math of Dose Response Curves.



NEXT GENERATION SCIENCE STANDARDS (NGSS) WORKSHOP

CT Science Center: supported two new NGSS-aligned laboratory programs that will be available for teachers to book as part of their field trip to the Science Center (Chemical Reactions, Earth and Solar System)



2015 GRANTS EXPO

PRATT & WHITNEY MUSEUM HANGAR, EAST HARTFORD, CT



OTHER ACTIVITIES

- **Helicopter/UAS/Aircraft Readiness Workshop (CCSU / Havelock, NC) (5 students)**
Students will attend a one week workshop, where they will learn how helicopters operate through a combination of classroom, lab, and testing experiences. Students will also network with professionals in the helicopter/aerospace industry. (2nd week of June 2017)
- **Community College Transfer Scholarships (3 students this fall)**
Eligible full-time students from a Consortium 4-year university/college who began at a community college may apply for a community college transfer scholarship.
- **STEM Education Research Grant (Fall '15 – '16: 2 awards)**
Successful applicants will show a plan to carry out research in the area of STEM education. This research may include, but is not limited to, K-12 or higher education STEM curriculum development, K-12 or higher education STEM education outcomes, or STEM education outreach programs.
- **STEM Education Programming Grant (Fall' 15-'16: 8 awards)**
Successful applicants will show a plan to undertake and complete programming related to STEM education. Funding may be used to support one-time or repeated initiatives that collaborate with other educational, industrial, or institutional partners to educate and increase exposure of students to STEM

OTHER ACTIVITIES

- **Two Student Spaceflight Experiments Programs**

CTSGC is proud to announce two communities in the state, East Hartford and Bridgeport, will engage in the Student Spaceflight Experiments Program (SSEP). SSEP is a program of the National Center for Earth and Space Science Education and the Arthur C. Clark Institute for Space Education that focuses on bringing student-generated research experiments into the Earth's upper atmosphere. CTSG is providing some funding to two Connecticut schools (and its communities) for SSEP's Mission 11 to the International Space Station: CREC Two Rivers Magnet School in East Hartford, and the Fairchild Wheeler Interdistrict Campus in Bridgeport.

- **Eclipse Ballooning Project**

We are a participant in the nation-wide Eclipse Ballooning Project. The ballooning efforts are led by the University of Bridgeport.

- **USIP**

to develop an Earth or space science payload that will fly on a NASA suborbital vehicle, such as a sounding rocket, balloon, aircraft, or commercial suborbital reusable launch vehicle.





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