



STEM TAKES FLIGHT

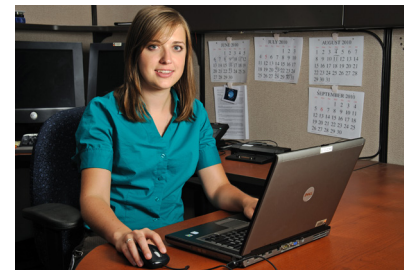
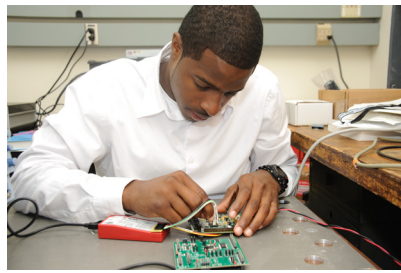
at Virginia's Community Colleges



Virginia's community college students pursuing studies in science, technology, engineering or mathematics (STEM) fields statewide have access to new scholarships, research experiences, internships and courses thanks to a two-year NASA grant to the Virginia Space Grant Consortium. Community College faculty in STEM fields will have access to professional development at NASA.

The Consortium's new program, *STEM Takes Flight at Virginia's Community Colleges*, provides \$5,000 mentored scholarships, paid industry internships, NASA research experiences, and new courses to foster STEM career awareness and workplace skills. The goal is community college retention in STEM academic tracks through graduation with an associate's degree or transfer to a four-year institution.

The STEM Takes Flight website at www.vsgc.edu.edu/stemtakesflight provides detailed information on all program components.



STEM Takes Flight Programs:

Mentored Scholarships - The Community College Bridge Scholar (CCBS) component will provide a \$5000 award and mentoring to 15 students during the spring 2015 semester and 2015 – 2016 academic year. Freshmen students can apply in fall semester 2014 with applications due November 17. CCBS will help bridge students to next steps in higher education or employment through coaching and mentoring by VSGC staff, four-year college faculty, and by upper classmen.

Industry Internships – Through STEM Takes Flight, ten students will receive sponsored industry internships under the Consortium’s Commonwealth STEM Industry Internship Program. Students can apply now for year-round internships in 2015 and 2016.

NASA Research Experiences - Through the Build/Fly/Learn component, selected students will work in teams to undertake hands-on summer research projects at NASA Langley Research Center. Individual student summer research projects at NASA Langley Research Center and NASA Goddard Space Flight Center’s NASA Wallops Flight

Facility will also be offered. These paid opportunities will be open to a total of 38 community college students who have completed their freshman year and are rising sophomores or in their sophomore year at the time of the research experience. Students will work under the guidance of a NASA mentor. Applications for summer 2016 are due January 30, 2016.

New Courses - Two multi-disciplinary courses designed to engage community college students in mission development and planning will be offered through Eastern Shore Community College. Students will develop and fly a sounding rocket payload as part of RockSat-C, a student flight opportunity at NASA Wallops in summer 2016. A third system-wide online course led by Virginia Western and Thomas Nelson Community Colleges will allow faculty-led student teams to tackle the issue of sea level rise and its impact on coastal communities and ecosystems. A service-learning component will bring students to NASA Wallops where they will use geospatial technology and a review of the historical data to study the impact at NASA Wallops. The Old Dominion

University’s Mitigation and Adaptation Research Institute (MARI) will advise the teams and provide webinars on the science of sea level rise.

Faculty Workshop - A residential professional development workshop for 20 community college faculty in STEM disciplines is scheduled to take place at NASA Wallops Flight Facility in early June 2015. Selected participants will receive a stipend and have their lodging and meals costs covered. The two-day workshop will focus on the integration of STEM in the NASA workplace. Faculty participants will experience a hands-on case study that will assist them in educating their students about the importance of team work, technical skills and problem solving.

Partners include: the Virginia Community College System, Eastern Shore Community College, Virginia Western Community College, Thomas Nelson Community College, NASA Langley Research Center and NASA Wallops Flight Facility. The initiative also has the support of Governor Terry McAuliffe.

For program details and online applications, visit vsgc.edu.edu/stemtakesflight

The Virginia Space Grant Consortium (VSGC), which is celebrating its 25th year, is a coalition of the Virginia Community College System, five Virginia colleges and universities, NASA, state educational agencies and other institutions representing diverse STEM and aerospace education, research and workforce development interests.