



VIRGINIA SPACE GRANT CONSORTIUM

Old Dominion University
Peninsula Center
600 Butler Farm Road, Suite 2200
Hampton, VA 23666
(757) 766-5210
FAX (757) 766-5205
vsgc@odu.edu
<http://www.vsgc.odu.edu>

VSCS – VIRGINIA SPACE COAST SCHOLARS
VASTS – VIRGINIA AEROSPACE SCIENCE AND TECHNOLOGY SCHOLARS
VESSS – VIRGINIA EARTH SYSTEM SCIENCE SCHOLARS

Here's the Basic Information about Our Enclosed Programs:

Member Institutions:

College of William & Mary
Hampton University
Old Dominion University
University of Virginia
Virginia Polytechnic
Institute and State University
Math Science Innovation
Center
Science Museum of Virginia
Virginia Air and Space Center
NASA Langley Research
Center
NASA Goddard Space Flight
Center's Wallops Flight Facility
State Council of Higher
Education for Virginia
Virginia Community
College System
Virginia Department
of Education
Center for Innovative
Technology

-VSCS studies mission designs, primarily focusing on NASA's previous, current, and future work.
-VSCS Students will work through 5 online modules and a final project, with each module consisting of technical writing, engineering design of science missions, and quizzes on reading material.
-VSCS 120 students will be selected based on course performance to attend one of three weeks of the VSCS Summer Academy at NASA Wallops Flight Facility on Wallops Island, VA in July or August 2018.
-VSCS 40 students will attend each week, with the ability to list preferences based on family plans and other summer activities.

-VASTS studies human space exploration, primarily focusing on NASA's previous, current, and future work.
-VASTS offers free college credit through Thomas Nelson Community College (as "Introduction to Engineering") to students who register.
-VASTS Students will work through 7 online modules and a final project, with each module consisting of technical writing, engineering design of space craft/planetary bases, math assignments, and quizzes on reading material.
-VASTS 180 students will be selected based on course performance to attend one of three weeks of the VASTS Summer Academy at NASA Langley Research Center in June or July 2018.
-VASTS 60 students will attend each week, with the ability to list preferences based on family plans and other summer activities.

-VESSS investigates environmental and earth system science through NASA's latest data and research, cultivating learning skills.
-VESSS offers free college credit through Thomas Nelson Community College (in "Geology 195 Earth System Science Lab") to students who register.
-VESSS Students will work through 7 online modules and a final project, with each module consisting of technical writing, science disciplines, data analysis and problem solving assignments, with quizzes on reading material.
-VESSS 80 students will be selected based on course performance to attend one of two weeks of the VESSS Summer Academy at NASA Langley Research Center in June or July 2018.
-VESSS 40 students will attend each week, with the ability to list preferences based on family plans and other summer activities.

-The application will likely close on November 5th, 2017, with the online course starting December 1st, 2017 and running through the end of April, 2018.

-All portions of the programs are absolutely free to the student.

Thank you and best wishes to all students interested!

VASTS Website





Exploring Earth System Science
through the Eyes of NASA

VIRGINIA EARTH SYSTEM SCIENCE SCHOLARS COURSE

A NASA-Based science, technology, engineering, and mathematics (STEM) course for high school juniors and seniors in Virginia.

IT IS NOT ALWAYS ROCKET SCIENCE. EXPLORE ANOTHER SIDE OF NASA!

Free to Selected Participants

Three College Credits

Dual Enrollment Credit

VIRGINIA EARTH SYSTEM SCIENCE SCHOLARS COURSE (VESSS)

As part of a new Virginia Earth System Science Scholars program, Virginia Space Grant Consortium (VSGC) and its partners are offering an exciting, free, online Environmental and Earth System Science Course. This course engages students in real world investigations of the Earth and its highly dynamic systems through the use of the latest NASA research and data. Students will explore all science disciplines while cultivating 21st Century Learning Skills such as critical thinking, data analysis, and inquiry-based problem solving. Tuition for the course is underwritten by VSGC.

Successful completion of the course will allow students to earn three college credits from Thomas Nelson Community College (TNCC) Geology credit.

RESIDENTIAL NASA SUMMER ACADEMY

Scholars selected for the Summer Academy spend seven days with science, engineering, and technology mentors as well as Master Educators at the NASA Langley Research Center in Hampton. Working in project teams, with guidance from their mentors, Scholars will integrate Earth System Science content as it applies to real world applications. Successful completion of the Summer Academy will allow students to earn one college credit from TNCC in Geology 195, Earth System Science Lab.

HOW TO APPLY

For more information, please visit: vsgc.edu.edu/VESSS or contact VSGC Education Specialist Joyce Corriere at jcorrier@odu.edu or joyce.h.corriere@nasa.gov.

EARTH SYSTEM SCIENCE THEMES

- Impacts of Climate Variability
- Hurricanes
- Atmospheric Composition
- Sea-level Change
- Biodiversity
- Global Pollution

ELIGIBILITY

- Virginia High School Junior or Senior
- Minimum GPA of 2.7
- Access to the Internet (home, school, public library)

APPLICATIONS OPEN:

August 2017

APPLICATION DEADLINE:

November 2017



The program is a partnership between the Virginia Space Grant Consortium, NASA Langley Research Center, Hampton University, and Thomas Nelson Community College, Virginia Aerospace Business Association (VASBA).



VIRGINIA AEROSPACE SCIENCE AND TECHNOLOGY SCHOLARS

A NASA-based science, technology, engineering and mathematics (STEM) educational program for high school juniors and seniors in Virginia.

VIRGINIA AEROSPACE SCIENCE AND TECHNOLOGY SCHOLARS

is a free competitive program that allows high school juniors and seniors to apply to take an engaging online NASA-developed course using a Space Exploration theme to teach a broad range of science, technology, engineering and mathematics (STEM) skills aligned with Virginia's Standards of Learning. Based on course performance, Scholars may be selected to participate in an all expense paid, seven-day residential Summer Academy at NASA Langley Research Center.

AEROSPACE SCHOLAR COURSEWORK

is offered for free online from December through May. This graded course consists of seven lessons and a final project that allow Scholars to build their knowledge of NASA, space exploration, and key STEM skills. Master Educators work with Scholars online throughout the course. Scholars can receive two college credits for successful completion of online coursework and two college credits for the Summer Academy.

RESIDENTIAL NASA SUMMER ACADEMY

Scholars selected for the Summer Academy spend seven days with science, engineering and technology mentors and master educators at NASA Langley Research Center in Hampton. Under the guidance of their mentors, Scholars will work in project teams to design a human mission to Mars and will be immersed in hands-on experiential STEM activities.

VASTS INDUSTRY PARTNERS:

Analytical Mechanics Associates, Inc., Boeing, Lockheed Martin Space Systems Company, Sierra Lobo, Inc., National Institute of Aerospace, Mid Atlantic Regional Spaceport, Science Systems Applications Inc., Virginia Aerospace Business Association, ASRC Federal, CSRA International.

TO APPLY YOU MUST:

- Be a high school junior or senior
- Be a Virginia resident and a US citizen
- Have a minimum GPA of 2.7
- Be at least 16 years old
- Have internet access and e-mail (home, school, library)

VISIT: vsgc.odu.edu/VASTS/

APPLICATIONS OPEN:

August 2017

APPLICATION DEADLINE:

November 2017



The program is a partnership between the Virginia Space Grant Consortium and NASA Langley Research Center, with additional sponsorship from the Commonwealth of Virginia and industry.

Launchpad to Study the Earth, Atmosphere, and Beyond

Virginia Space Coast Scholars

Welcome to Awesome.

The Virginia Space Coast Scholars (VSCS) is a program for **High School Sophomores** focusing on the science, engineering, and technology integral to current missions at NASA Goddard's Wallops Flight Facility and the Mid-Atlantic Regional Spaceport.

This dynamic, **FREE** program designed by the Virginia Space Grant Consortium (VSGC), in collaboration with Wallops Flight Facility, inspires students who possess technical and/or scientific interests and are motivated to learn about the many different opportunities that NASA offers.

The program features two key elements: 1) a dynamic on-line science, technology, engineering, and mathematics (STEM) learning experience featuring five modules; and 2) a seven-day residential Summer Academy at Wallops Flight Facility on Wallops Island, VA, where scholars will learn first hand from NASA professionals and their partners about the latest, cutting edge technologies and missions.

Who Can Apply

Students from across the Commonwealth of Virginia are selected to participate through a competitive application process. In order to qualify for participation, students must:

- Be a Virginia resident to participate in the online course
- Be a U.S. citizen to attend the Summer Academy at NASA
- Be a sophomore in high school
- Be interested in science, technology, engineering or math
- Have a minimum GPA of 2.7
- Have access to the Internet (home, school, public library)
- Have an email address



Program Experiences:

Online

This is an engaging, informal learning environment where students progress through a series of five online modules from January through April to learn about NASA's science missions that are conducted or launched from Virginia's Eastern Shore.



Summer Academy

Selected students will apply the knowledge and basic project management skills acquired during the online modules while working in project teams to explore topics and skills integral to mission design. Students are invited to one of the two academies based on performance in the online course throughout the winter and spring.

Application Deadline

November 2017

Learn more at:

www.vscs.spacegrant.org



The VSCS program is a partnership between the Virginia Space Grant Consortium, NASA Goddard's Wallops Flight Facility, the Mid-Atlantic Regional Spaceport, and the Commonwealth of Virginia.