



THE GOVERNOR'S SCHOOL for SCIENCE AND TECHNOLOGY

2023 Graduating Class Profile

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Community

The Governor's School for Science and Technology (GSST) serves the approximately 490,000 residents of the Virginia peninsula, reaching from the Chesapeake Bay to the historic Williamsburg area. The region is home to NASA Langley Research Center, Thomas Jefferson National Accelerator Facility, Northrop Grumman Newport News, Canon Virginia, Huntington Ingalls Newport News Shipyard, Veterans Administration Medical Center, Hampton University, The College of William and Mary, Christopher Newport University, Virginia Institute of Marine Science, and installations of all branches of the United States Military.

High School

GSST was founded in 1985 and is one of nineteen Governor's Schools in Virginia that serve as regional magnet programs for gifted high school students. GSST provides high-achieving students with a community of peers taking advanced courses in math, science, and technology, along with a rigorous grounding in research methodology. Students are drawn from nineteen high schools in seven school divisions (Hampton, Newport News, Poquoson, Williamsburg-James City County, York County, Gloucester County, and Isle of Wight County) and spend approximately half of their school day (3.25 hours) at the GSST. In addition to rigorous, college-level course work, seniors conduct an Honors Research/Mentorship project outside school hours. Students completing the program earn a Virginia Governor's Seal.

Faculty

The rigor of the GSST program rests on the exceptionally strong math and science backgrounds of its thirteen faculty members. All hold degrees in mathematics, science, or computer science; six hold masters degrees and six hold doctorate degrees.

Curriculum

All courses are taught at a college level and many are accredited as dual enrollment courses by local colleges. Curricula promote active scientific learning through extensive laboratory investigations which incorporate advanced scientific technologies. Communication skills are developed through multimedia presentations to peers and professionals.

Admissions

The admissions process is a competitive one based on mathematics and science achievement, teacher recommendations, and standardized test scores.

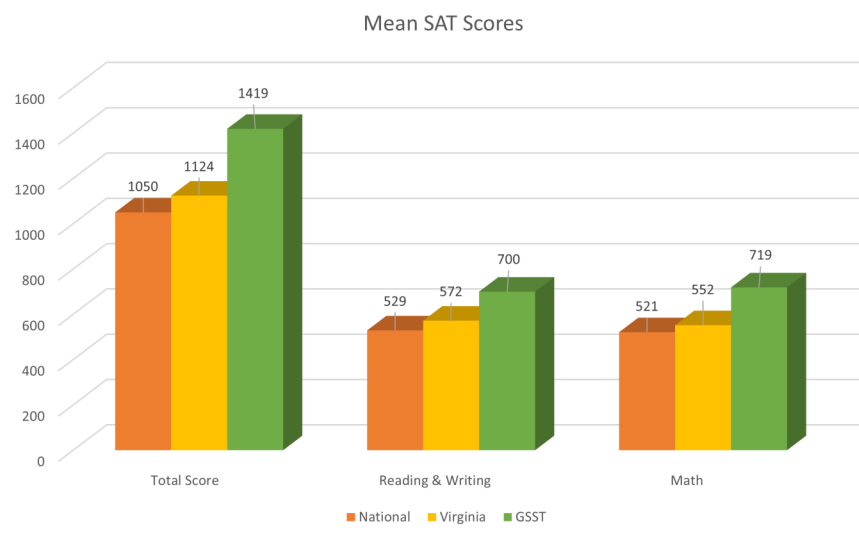


The Governor's School at New Horizons is a current and a founding member of the *National Consortium of Secondary STEM Schools*.

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100 Seniors

SAT Score Comparisons



This reflects both Virginia and National averages in 2022 compared with 2023 results of GSST seniors. Due to students being able to opt out of the SAT, this data reflects 73% of senior test score data.

Colleges Being Attended by Class of 2023

UNIVERSITY OF VIRGINIA	19	JOHNS HOPKINS UNIVERSITY	1
VIRGINIA POLYTECH & STATE UNIVERSITY	19	LOUISIANA STATE UNIVERSITY	1
OLD DOMINION UNIVERSITY	7	RENSSELAER POLYTECHNIC INSTITUTE	1
VIRGINIA COMMONWEALTH UNIVERSITY	6	ROANOKE COLLEGE	1
COLLEGE OF WILLIAM AND MARY	5	ROSE-HULMAN INSTITUTE OF TECHNOLOGY	1
CHRISTOPHER NEWPORT UNIVERSITY	3	THE APPRENTICE SCHOOL	1
EMBRY-RIDDLE AERONAUTICAL UNIVERSITY	3	UNIVERSITY OF ALABAMA	1
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	3	UNIVERSITY OF MARYLAND	1
PURDUE UNIVERSITY	3	UNIVERSITY OF MICHIGAN	1
HAMPTON UNIVERSITY	2	UNIVERSITY OF NOTRE DAME	1
PRINCETON UNIVERSITY	2	UNIVERSITY OF PAVIA	1
ARIZONA STATE UNIVERSITY	1	UNIVERSITY OF RICHMOND	1
BRIDGEWATER COLLEGE	1	VANDERBILT UNIVERSITY	1
BROWN UNIVERSITY	1	WILLIAMS COLLEGE	1
CARNEGIE MELLON UNIVERSITY	1	YALE UNIVERSITY	1
COSTAL CAROLINA UNIVERSITY	1		
CORNELL UNIVERSITY	1		
CULINARY INSTITUTE OF VIRGINIA	1		
DUKE UNIVERSITY	1		
GEORGE MASON UNIVERSITY	1		
GEORGIA INSTITUTE OF TECHNOLOGY	1		
GOUCHER COLLEGE	1		
HOWARD UNIVERSITY	1		

**2022—2023 Scholarship
Awards Offered: \$7,663,150**

Program of Study

**College-level Course Offerings*

***Science Courses:**

Advanced Chemical Analysis
Advanced Biological Analysis
Calculus-based Physics I & II
Calculus-based Physics III & IV
Computational Physics
Computer Programming

***Mathematics Courses:**

College Modern Pre-calculus
College Calculus
Multivariable Calculus
Linear Algebra
Differential Equations

***Research Courses**

Research Methods & Ethics with Statistical Analysis
Honors Research with Data Science and Mentorship

**Courses and faculty are approved for dual enrollment through the Virginia Community College System.*

Honors Research and Mentorship Program

Program

Description

A primary goal of the GSST is to provide students with an opportunity to conduct serious scientific research. All students take a junior year course in Research Methodology and Ethics, which introduces research methodology, statistics, critical thinking skills, and skills of scientific writing and presentation. In their senior year, students design and conduct a year-long research project under the direction of a scientific, engineering, medical or other professional in the community. The field component is supported by formal course work which guides students through the entire process, from the selection of a problem to the final presentation. In addition to their outside mentor, each student is assigned a faculty advisor to assist and evaluate mentorship research.

The Project

Major aspects of the mentorship experience include preparation of a formal written proposal for their project, oral presentation of proposal and status report at mid year to GSST faculty, final research document, and presentation of final results to a panel of professionals in appropriate fields at the GSST Spring Research Symposium. In addition, many students present their findings at local, regional, and national science competitions and symposia. Exceptional work has been published in professional journals.

Research Sites

Research sites that have participated in the GSST Honors Research/Mentorship program include NASA Langley Research Center, Thomas Jefferson National Acceleration Facility, Virginia Institute of Marine Science, MITRE Corporation, College of William and Mary, Virginia Tech Extension Center, Hampton University, Christopher Newport University, Virginia Living Museum, local engineering firms, hospitals, and a variety of individual medical and professional firms.

Extracurricular Activities

In addition to its rigorous academic offerings, GSST students participated in a number of extracurricular activities and competitions.

- HUNCH – Participating in NASA’s High Schools United to Create Hardware program, a team of senior engineering strand students designed and fabricated transportable foot loop restraints using bio-mimicking adhesives for International Space Station astronauts.
- I/ITSEC Future Leaders Pavilion at Orlando, FL.
- ICAT – Award winning teams of senior students conceived, proposed, and designed engineering projects focused on the integration of artistic creativity and engineering discipline in an invitation-only program sponsored by the Institute for Creativity, Arts, and Technology at Virginia Tech.
- Verizon App Challenge– Students create app concepts that will have an impact on their local school. The GSST team won both best in State and Region.

GSST students participated in the following with many students earning regional and national recognition:

- Math Contest at Christopher Newport University
- Great Computer Challenge at Old Dominion University
- International Science & Engineering Fair in Los Angeles, California
- Tidewater Science & Engineering Fair at Old Dominion University
- Virginia Junior Science & Humanities Symposium at James Madison University



Contact Information



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