



**THE GOVERNOR'S SCHOOL**  
**for**  
**SCIENCE AND TECHNOLOGY**

**Virtual Parent Information Session**

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- **Director, Governor's School for Science and Technology (GSST)**





# What is The Governor's School for Science & Technology?

- ½ day **STEM** based program
- Attend in **11<sup>th</sup>** and **12<sup>th</sup>** grade
- Spend **1/2 at GSST** and other ½ day at home school



# What's Unique About Governor's School?

- Faculty with advanced STEM degrees
- Courses that are dynamic, hands-on, and college level
- Two year research sequence
- Community of high-achieving peers
- Extracurricular activities: competitions and clubs

# Faculty

- All have masters (30%) or Ph.D. (70%) in a math/science discipline
- Several have conducted research at research labs, universities or other organizations and/or taught at universities





# Advanced STEM Courses

- Taught at a college level; many eligible for dual enrollment credit
- Curricula consist of foundational science principles updated with content from emerging STEM disciplines
- Enriched by collaborations with College of William and Mary (research grant) and VT (data science undergrad course content)
- All science courses include extensive labs and hands-on projects



# Two Year Research Sequence

- **Junior year: students master skills required to do STEM research**
- **Senior year: Students engage in an individual or group project of their choice, guided by a Faculty Advisor and Mentorship Coordinator**



# Community of Learners

- 180 juniors and seniors come from 21 high schools, 7 school divisions
- Students study, collaborate, and socialize with academic peers
- Students engage with faculty who have advanced degrees and have worked in STEM related fields





# Extracurricular Activities

- **Competitions:** e.g. Great Computer Challenge; Science Bowl; math competitions, science fairs
- **STEM career interests:** Roots 4 STEM, FIRST Robotics, Pi Club
- **Clubs:** Student Advisory Board, Yearbook



# Governor's School: You've Heard It's Challenging

- Students are adjusting to college-level course content
- Students are commuting between two high schools
- Time management skills are needed
- It's rigorous, but...



# The Governor's School Provides Support

- **ALEKS summer software program**
- **Student Academic Support (SAS) program for students**
- **Faculty advising**



# Preparing to Succeed in Math: ALEKS

- **ALEKS Summer Software Program**
  - Students take an online diagnostic test that measures their mastery of math concepts from the math course they've just completed
  - Diagnostic test is used for math course placement – and is used by the software program to generate an adaptive, online program that students use through the summer to address any weaknesses



# Student Academic Support (SAS)

- Students who are identified as having difficulties by teachers, parents, or themselves, are referred to Student Academic Support Program (SAS)
- Teachers, student, parent, and GSST administration work together to institute interventions to bolster and monitor student success



# Faculty Assistance/Advising is Built-In

- Time set aside for students to make appointments to meet with teachers for help – or to finish a lab, and/or collaborate with other students on homework or projects



# Applying to Governor's School





# Admission Process: Factors Considered

- Overall GPA
- PSAT score, *if submitted. SAT or ACT can be submitted instead.*
- Performance in math and science courses:
  - Rigor of math/science courses
  - Grades in math/science courses
  - Teacher recommendations from current math & science teacher
  - SOL scores





# Admission Process: Prerequisites

- **Math minimum:**
  - Algebra II/Trig
  - PreCalculus/Math Analysis for Engineering strand
- **Science**
  - Biology
  - Chemistry



## We ***Don't*** Require or Consider:

- Essays
- Previous research/science fair projects
- List of Extracurricular Activities



# Application Process: First Step is Selecting an Academic Strand

Students apply to one Academic Strand only

Each student competes with all other students in his/her district who are applying to that Academic Strand

Academic Strand options:

- **Biological Sciences:** Chemistry, Biology
- **Computational Sciences:** Algebra-based Physics, Programming
- **Engineering:** Calculus-based Physics

# Online Application: Logistics

- Watch the instructional video – located on The Governor's School website under the Prospective Student tab
- <https://nhrec.org/gsst/home/how-to-apply/>
- Click the Apply Now Button to be taken to the online application

## How to Apply



Apply Now



# Application Components

- Students complete a simple online application, providing background information about themselves
- Students also provide name and contact information for school counselor plus current math and science teachers
- School counselor and teachers receive online requests to complete their application components:
  - Counselor: courses, grades
  - Teachers: recommendation form

# Application Timeline

- **December through February 14:** Complete online application
- **February 16:** Recommendations from math and science teachers due
- **Early April:** all applicants will receive a letter notifying them of their admissions decision



## Online Application

Welcome to the New Horizons Regional Educ Centers' Application. Please follow these steps to continue.

1. **Select "Next" on this page, and enter the information requested by the online forms.**  
Note: Required fields are marked as "Required", and New Horizons Regional Educ Centers will receive the data exactly as it is entered. Please be careful of spelling, capitalization, and punctuation.
2. **On the "Summary" page, select "Submit"!**  
On the submission confirmation page, you will have the opportunity to print out a copy of your registration to keep for your records. Note: Once the form is electronically submitted, you will receive an e-mail confirmation.
3. After your application has been submitted, your professional school counselor will enter additional information regarding grades and attendance.
4. Governor's School for Science and Technology Applicants Only - On the submission page, you will be given a link to the SchoolRecs website where you will submit requests for teacher recommendation(s).



# Biological Sciences

- **Appropriate for:**
  - Students considering careers in the health sciences, life sciences, biology, chemistry or physics research or engineering
- **Unique opportunities:**
  - Hands-on experience with college-level lab techniques, including enzyme analysis, PCR, and CRISPR/Cas.
  - Access to specialized equipment and research methods typically found in upper-level undergraduate or graduate programs.
- **Prerequisites**
  - **Math:** minimum of Algebra II/Trig
  - **Science:** Biology, Chemistry
  - Recommended to take Physics at home school

# Calculus-Based Physics: Engineering

- **Appropriate for:**
  - Students considering engineering and other STEM careers
- **Unique opportunities:**
  - EDIE (Engineering Design, innovation and Entrepreneurship) Lab, students learn digital electronic systems, CAD (Computer Aided Design) and the engineering design process.
  - This knowledge is applied to keystone engineering design projects, such as the AirDuino, a collaboration with W&M, students constructing and programming microcontroller-based air pollution detector device, and collect data at various locations in the Hampton Roads region.
- **Prerequisites**
  - **Math:** minimum of PreCalculus/Math Analysis
  - **Science:** Biology, Chemistry



# Computational Sciences: Physics/Programming

- **Appropriate for:**
  - Students interested in computer science, software engineering, data science, and related fields
- **Unique opportunities:**
  - The first year course teaches fundamental principles of physics and computational programming in Python. In the second year, students study C++ programming along with foundational concepts in data science, provided through a landmark pilot collaboration between GSST and the Computational Modeling and Data Analytics program at Virginia Tech.
- **Prerequisites**
  - **Math:** minimum of Algebra II/Trig
  - **Science:** Biology, Chemistry

# Engineering, Design, Innovation, and Entrepreneurship: EDIE Lab

- **Mission**
  - Immerse students in engineering, design, innovation, and entrepreneurship (EDIE) with a focus on integrating engineering and computer science.
- **Year-Long Collaborative Projects**
  - Seniors from the Engineering and Computational Science strand work in interdisciplinary teams, applying knowledge from various projects.
- **Hands-On Learning**
  - Students engage in cutting-edge projects, gaining practical experience and solving real-world problems with practical applications.
- **Innovation with Impact**
  - Develop and prototype products with market potential or research applications, preparing students for dynamic careers in STEM and beyond.

# Get Info about GSST & Application Process: Prospective Student Pipeline (PSP) Newsletter

- Everyone is welcome!
- No age or academic criteria
- Sign up on the Governor's School website
  - Go to Prospective Student tab, click on Information for Prospective Students, complete online form or click [here.](#)





GSST Program Overview Video

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**Further Questions?**

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