Prince William County Public Schools · Manassas City Public Schools · Manassas Park City Public Schools

# 2022-2023 School Profile

Jason Calhoun, Ph.D., Director

The Governor's School at Innovation Park (GS@IP) is a specialized regional center for the advanced study of science, technology, engineering and mathematics, serving students in grades 11 and 12 from the Manassas Park City Public School, Manassas City Public School, and Prince William County Public School Divisions. The vision shared by GS@IP faculty and participating school divisions is to allow students to encounter a range of opportunities encouraging intellectual and academic excellence. GS@IP is a member of the National Consortium of Secondary STEM Schools (NCSSS).

#### **Mission Statement**

The mission of GS@IP is to engage students in rigorous academic study, challenge them to acquire knowledge, develop understanding, think reflectively, and take intellectual and creative risks in problem solving for the benefit of the Earth.

### **About GS@IP**

- Established in 2010 as Virginia's 19th Academic-Year Governor's School, GS@IP is governed by a Joint Board comprised of representatives from Manassas City Public Schools (MCPS), Manassas Park City Public Schools (MPCS), Prince William County Public Schools (PWCS) and George Mason University (GMU).
- Our school is housed on George Mason University's SciTech (Manassas) Campus, located in the western portion of Prince William County, Virginia. All courses (except Innovations) are offered for college credit through dual enrollment with GMU.
- GS@IP provides a two-year shared-day program to 166 gifted and academically motivated students from three participating school divisions, which consists of fifteen high schools.
- Students attend morning classes at The Governor's School, then
  return to their home school for their other required courses,
  electives, and extracurricular activities. This allows students to
  remain active at their base high schools while our program
  provides them with like-minded colleagues and rigorous
  academic courses.

#### **Admissions**

In order to attend The Governor's School, students undergo a rigorous and competitive application process. We seek college-bound students in the top 15 percent their class who are creative, self-motivated, high-achievers looking for a level of challenge in STEM-related fields beyond what is offered at most high schools.

#### Curriculum

#### All courses are taught at the AP, post-AP, or dual enrollment level.

The rigorous instructional design of the program focuses on learning styles of gifted and talented students and integrates strands in biology, chemistry, engineering, and physics with mathematics, additional concepts from engineering and technology, and laboratory research. Learning experiences focus on real-world research with mentorship opportunities in business, industry, government, and university settings. Principles of Technology and Engineering allows students to experience the engineering design process, work collaboratively and collectively

with peers, as well as learn core skills utilized in all engineering disciplines.

# Mentorship/Internship

The GS@IP mentorship/internship program allows students to conduct inquiry-based research and/or project development working with the support of experts from corporate, university, and government institutions throughout the metropolitan Washington D.C. area. Students are guided by mentors who are accomplished scientists, engineers or other technical professionals working at these agencies. The mentorship program provides a collaborative option for dedicated students to fulfill their required research projects. Agencies supporting student project development or research by providing mentors and/or funding have included: BAE; George Mason University College of Science and Volgenau School of Engineering; Jewell Technology Consultants; Novant Health/PW Hospital; ECS; Aerojet; Aurora Flight Sciences; Dominion Power; Lockheed Martin; Micron; Dewberry; ECS Mid-Atlantic; PWC Government; Pangea-Global; Assett, Inc.; Dewberry; SAI Engineering, AVER Technologies and Progeny Systems.

# **Student Research and Product Development**

Student research and product development are required components of coursework at GS@IP. Students display and discuss their work at an Annual Research Symposium. The Symposium is held in late May at the George Mason University SciTech Campus.

Project categories include:

Animal Sciences (AS)

Biochemistry (BI)

Cellular and Molecular Biology (CB)

Chemistry (CH)

Computer Science (CS)

Engineering: Electrical and Mechanical (EE)

Materials and Bioengineering (EN)

Environmental Management (EM)

**Environmental Sciences (EV)** 

Medicine and Health Sciences (ME)

Microbiology (MI)

Physics, Astronomy and Robotics (PH)

GS@IP student work has been awarded recognition at local, state, national and international levels including: Regional, Virginia State, and International Science and Engineering Fairs; Virginia

CyberChallenge; Ocean Bowl Challenge; Real World Design Challenge, International Space Olympics, NASAS Real World in World, Verizon App Challenge, and Siemens We Can Change the World Challenge, amongst others.

### Coursework

#### Junior Courses

Pre-Calculus\*

Calculus I/II\*

Biology I/II\*

Chemistry I/II\*

College Physics I/II\*

Principles of Technology and Engineering – options include:

Computer Science\*

Introduction to Engineering\*,\*\*

Inventions and Innovations

Mentorship or Independent Research\*

Practicum in Engineering\*,\*\*

#### Senior Courses

Calculus I/II\*

Multivariable Calculus\* / Linear Algebra\*

Microbiology\* / Anatomy & Physiology\*

Pre-Organic Chemistry\* / Environmental

Chemistry\*

University Physics I/ II\*,\*\*

Statics\*,\*

Mechanics, Thermodynamics or Dynamics\*,\*\*

Principles of Technology and Engineering – options include

Computer Science\*

Geomatics and Engineering Graphics\*

Inventions and Innovations

Bioengineering\*

Computing for Scientists\*

Mentorship or Independent Research\*

\*Course offered for dual enrollment through George Mason University.

\*\*Engineering Thread

# **Grading Scale**

The Governor's School @ Innovation Park and GMU use the following grading scale:

A - Excellent (90-100)

B - Above average (80-89)

C - Average (70-79)

D -Below average (60-69)

F - Failure (0-59)

I - Incomplete

Students at The Governor's School @ Innovation Park must pledge to abide by both the public school systems' Honor Codes as well as George Mason University's Honor Code.

### **Class Rank/Percentile**

Class rank and percentile is not computed or estimated at the GS@IP.

# Average SAT Scores (GS@IP Class of 2022)

	Mathematics	Reading & Writing
GS@IP	680	664
Virginia	552	572
National	521	529

# GS@IP - College & University Acceptance Data (Class of 2022 Data)

Brown University - Providence, RI Carnegie Mellon University - Pittsburgh, PA

Case Western Reserve - Cleveland, OH

Christopher Newport University - Newport News, VA Colorado School of Mines - Golden, CO

City University of NY (CUNY) Brooklyn College - New York, NY Drew University - Madison, NJ

Drexel University - Philadelphia, PA

Duquesne University - Pittsburgh, PA

Florida Institute of Technology (Florida Tech) - Melbourne, FL

Fordham University - New York, NY George Mason University - Fairfax, VA

Georgetown University - Washington, D.C. George Washington University - Washington, D.C.

Georgia Institute of Technology (Georgia Tech) - Atlanta, GA Harvard University - Cambridge, MA

James Madison University - Harrisonburg, VA John Jay College of Criminal Justice - New York, NY

Johns Hopkins University - Baltimore, MD Macalester College - Saint Paul, MN

McDaniel College - Westminster, MD

Michigan State University - East Lansing, MI

Northern Virginia Community College

Ohio State University - Columbus, OH

Pennsylvania State University (Penn State) - State College, PA

Purdue University - West Lafayette, IN

Rensselaer Polytechnic Institute (RPI) - Troy, NY

Rochester Institute of Technology (RIT) - Rochester, NY

Rutgers University - New Brunswick, NJ St. Bonaventure University - Allegany, NY

St. Lawrence University - Canton, NY

Stanford University - Stanford, CA

State University of New York, Albany (SUNY-Buffalo) - Buffalo, NY

Temple University - Philadelphia, PA

The College of William & Mary - Williamsburg, VA

Union College - Schenectady, NY

United States Military Academy - West Point, NY United States Naval Academy - Annapolis, MD

University of Alabama - Tuscaloosa, AL

University of California, Berkeley (Cal) - Berkeley, CA

University of California, Los Angeles (UCLA) - Los Angeles, CA

University of California, Riverside (UC Riverside) - Riverside, CA

University of California, San Diego (UC San Diego) - San Diego, CA

University of California, Santa Cruz (UC Santa Cruz) - Santa Cruz, CA

University of Connecticut (UConn) - Storrs, CT

University of Florida - Gainesville, FL

University of Illinois - Urbana-Champaign, IL University of Mary Washington - Fredericksburg, VA

University of Maryland - College Park, MD

University of Massachusetts - Amherst (UMass) - Amherst, MA

University of Massachusetts - Boston (UMass-Boston) - Boston, MA

University of Pittsburgh (Pitt) - Pittsburgh, PA

University of Rochester - Rochester, NY

University of South Carolina - Columbia, SC University of Southern California (USC) - Los Angeles, CA

University of Virginia (UVa) - Charlottesville, VA

University of Washington - Seattle, WA

University of Wisconsin - Madison - Madison, WI Vanderbilt University - Nashville, TN

Virginia Commonwealth University (VCU) - Richmond, VA

Virginia Polytechnic Institute & State University (Virginia Tech) - Blacksburg, VA

Virginia Wesleyan University - Virginia Beach, VA Worcester Polytechnic Institute (WPI) - Worcester, MA

Yale University - New Haven, CT