Information Technology Strand

Information Technology (IT) is one of the fastest growing fields. Students will develop computer programs, apps, and create web experiences. Professionals in IT careers think outside the box by developing software, screen interactions, collect and make data meaningful, or connect hardware.

Students in the IT program develop professionalism and earn certifications in up to four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media.

Students will:
- Learn skills related to information technology basics, Internet fundamentals, network systems, and computer maintenance,
- Troubleshoot computers and applications,
- Program games, graphics,
- Design web pages and interactive media.

Courses

Information Technology Fundamentals
Computer Information Systems (I & II)
Web Page Design (I & II)
Video Game Programming
Computer System Technology (I & II @ -NHREC)
Senior Mentorship

Apply today.
See your school counselor or visit our website for more info:
http://www.sbo.hampton.k12.va.us/schools/careeracademies/careeracademies.html
**Aerospace and Information Technology Academy**

The Aerospace and Information Technology Academy is part of the Greater Peninsula Governor’s STEM Academy. Students who successfully complete all requirements will receive a diploma seal upon graduation. During the four year program, students will meet professionals in the strand areas, visit businesses in the career areas, and prepare for exciting and futuristic careers. In addition, students in Air Force JROTC may participate in the academy.

Hampton City is the first training ground for astronauts. With local history and resources such as NASA Langley Research Center, Langley Air Force Base, and a variety of aerospace and research companies, Hampton is a logical place for an aerospace academy. In addition, Hampton University, National Institute of Aerospace, Thomas Nelson Community College and Virginia’s Colleges and Universities have aerospace and engineering programs to meet the needs of future air and space researchers and travellers.

---

**Business Information Management Strand**

Learn the language of business and how to run a successful business or enterprise. Run a virtual enterprise and work with local professionals in banking, economic development, and other business and finance business leaders.

**Courses**

- Accounting (I & II)
- Information Technology Fundamentals
- Computer Information Systems
- Web Page Design (I & II)
- Video Game Programming
- Virtual Enterprise

---

**Aerospace Strand**

**Project Lead The Way program**

In the Aerospace Strand, Students will:

- **Explore** the evolution of flight, navigation control, and flight fundamentals,
- **Investigate** aerospace materials, propulsion, space travel, and orbital mechanics,
- **Learn** alternative applications for aerospace engineering concepts,
- **Analyze**, design, and build aerospace systems while applying knowledge gained throughout the course, and
- **Synthesize** lessons learned to create a final presentation about the future of the industry and their professional goals.

Students will work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Student teams present and defend their design solution to an outside panel.

**Courses**

- Introduction to Engineering Design (IED)
- Principles of Engineering (POE)
- Digital Electronics (DE)
- Aerospace Engineering (AE)
- Senior Capstone Course: Engineering Design and Development (EDD)