

High School Programs

Academy of Science, Engineering, and Information Technology

This program offers students an opportunity to develop their interests and talents in Engineering, Biological and Environmental Sciences, and Information Technology.

Engineering: Students who are interested in the various fields of research or applied mathematics, science, and engineering experience a challenging four years of required and elective subjects geared to match their interests and to prepare them for a college or university engineering program. The programs are designed for highly motivated students and offer enriched and accelerated coursework, as well as, the possibility to work with professionals in the multiple fields of engineering. Students also have the option to earn college credit for selected courses.

Biological and Environmental Sciences: The Biological and Environmental Science program is intended for science-oriented and environmentally motivated students who plan to attend a four-year college or university. Students will participate in field study experiences; discuss and take action on environmental issues; and learn about the environment from the perspectives of history, law, and public policy to understand the balance between the environment, politics, economics, and society. Students participate throughout the program in authentic situations as real environmental scientists. Research and internship opportunities may also be available.

Information Technology: Students are prepared with the fundamental and advanced computer, interpersonal readiness, and problem-solving skills necessary to succeed in the computer career field. The program provides students with a background in both hardware and software, and telecommunications. In addition students learn several programming languages which may include: C++, BASIC, COBOL, and Visual Basic. Students also become proficient in the use of all Microsoft Office products and may obtain a variety of Microsoft certifications. The program is designed to provide students with the extensive and diverse computer knowledge needed to pursue a computer related college course of study or work entry-level position. College credit may also be available.



LHS

-available at Lansdowne High School Academy (LHS)

Engineering Pathway

Program of Study

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|---|---|---|--|
| Keyboarding/Career Strategies | Engineering Technology OR Principles of Engineering | Physics OR Introduction to Networking | Research and Experimentation in Technology |
| <u>Elective Courses</u> IETC Drafting and CAD Capstone Work Experience Engineering Internship | | | |

High School Programs

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| Dual Enrollment |
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Biological and Environmental Sciences Pathway

Program of Study

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|---|--|--|---|
| G/T or Honors Biology OR Environmental Science | Chemistry OR Ecology of Maryland | Physics OR AP Biology OR Paramedical Biology | AP Environmental Science OR Forensic Science |
| <u>Elective Courses</u> Geometry Algebra I Algebra II College Algebra GT/AP Statistics | | | |

Information Technology Pathway

Program of Study

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|--|---|---|---|
| Introduction to Information Technology | HTML/JavaScript OR Software & Computer Applications II | Visual basic OR Computer Science AP A | Object Oriented Programming using C++ OR Computer Science AP AB |
| <u>Elective Courses</u> Database Applications | | | |

Lansdowne High School

3800 Hollins Ferry Road
 Baltimore, MD 21227
 410-887-1415

Program Title: Academy of Science, Engineering, and Information Technology

Applications are accepted for Grades 9 and 10. Transportation is provided for students who are zoned for the Southwest or Northwest areas, as well as those who would otherwise attend Dulaney or Towson High School.