

# **Preparing Men of Scholarship in the 21<sup>st</sup> Century**

## **A Curriculum for the 21<sup>st</sup> Century that Interests and Engages Students Regardless of Academic Ability**

- 16 STEM (Science, Technology, Engineering and Math) electives (College Prep through AP)
- Current courses are incorporating more project-based and inquiry learning.
- Electives and extra-curricular activities expose students to possible career paths, interact with industry professionals, and apply what they are learning to solve real world problems.

## **Technology that Supports Learning and Prepares Students for College:**

- Full Multi-Media Classrooms
- 1 to1 iPad Program w/ 50+ academic apps. iPads, books & apps are included in tuition.
- Science Labs outfitted with Vernier and Pasco equipment.
- Over 120 laptops for student use
- Advanced Technology for Students
  - Four 3-D Printers (Makerbot 2x)
  - Epilog Laser Engraver
  - Cisco Switches, Routers, WAPs

## **A Mindset of Continual Improvement**

- Monthly professional development training for the faculty
- Research shows that collaboration among colleagues increases student achievement. Time is set aside every Wednesday for faculty development
- Teachers learn how to incorporate technology & meet in learning groups to discuss curriculum & methodology, & stay current in their discipline.

## Interested in STEM? Start Here

### Freshman Year

Technology for the 21<sup>st</sup>  
Century

- Lego Mindstorms
- Mousetrap Racecar
- Intro to Programming
- Digital Citizenship

PA Junior Academy  
of Science (PJAS)

Vex Robotics

Mechanical Limb  
Design Challenge

Chain Reaction  
Contraption

(Grades 9 & 10)

### Sophomore Year (Current Electives)

- Intro to Programming
- Pre-Engineering
- Experiential  
Engineering

Data Jam

Math Competitions

Chess Club

Science Bowl

Gaming Club

FIRST Robotics  
Competition

PA First STEM  
Competition

Future Business  
Leader of America

Opportunities to  
Experience STEM  
Careers

### Junior / Senior Year

- Honors Computer  
Science with Data  
Structures (College in  
High School Credit)
- 6 AP STEM Electives  
(Calculus AB & BC,  
Statistics, Biology,  
Chemistry, Physics C)
- Bio-Tech/Engineering
- 3D - Design & Modeling
- Computer Networking
- Advanced Software  
Applications
- Principles of  
Entrepreneurship

End Here  
College Ready to Major  
in a STEM Field