



## WASHINGTON COUNTY BOARD OF EDUCATION

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Public Schools

Building a community that inspires  
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The Board of Education of Washington County does not discriminate on the basis of race, color, sex, age, national origin, religion, disability, or sexual orientation in matters affecting employment or in providing access to programs to Washington County Public School System students.

For more information contact  
Mr. Randy Longnecker – STEM  
Counselor Williamsport High School  
Guidance Office  
301-766-8426



**S**cience,  
**T**echnology,  
**E**ngineering, and  
**M**athematics  
Academy  
2016-2017

Williamsport High School  
5 South Clifton Drive  
Williamsport, Maryland 21795

Students will lay the groundwork for one of five pathways during the first two years of high school. At the end of the sophomore year, they will choose one of the pathways in which to concentrate. All five pathways have an engineering component, as this is integral in any college major and career in science, technology, engineering or math. The STEM Academy includes Project Lead The Way (PLTW) courses.

### **Core STEM Courses**

#### **Science**

Honors Biology  
Honors Chemistry  
Honors Physics

#### **Technology Education**

Introduction to Engineering Design

#### **Math**

Honors Geometry  
Honors Algebra II  
Honors Pre-Calculus/Trigonometry

*Students should be enrolled in Honors/AP math and science courses whenever possible.*

#### **STEM Science Pathway**

4 Honors/AP Science Courses  
Principles of Engineering  
Engineering Design and Development

#### **STEM Math Pathway**

4 High School Honors/AP Math Courses  
Principles of Engineering  
Engineering Design and Development

#### **STEM Hybrid Pathway**

1 Advanced Placement Science Course  
1 Advanced Placement Math Course  
Principles of Engineering  
Engineering Design and Development

#### **Aerospace Engineering PLTW\***

Principles of Engineering  
Digital Electronics\*\*  
Aerospace Engineering\*\*  
Engineering Design & Development  
Advanced Placement Calculus (recommended)  
Advanced Placement Physics (recommended)

#### **Mechanical Engineering PLTW\***

Principles of Engineering  
Digital Electronics\*\*  
Computer Integrated Manufacturing\*\*  
Engineering Design & Development\*\*  
Advanced Placement Calculus (recommended)  
Advanced Placement Physics (recommended)

#### **Possible Electives for any Pathway** (unless required)

- Advanced Placement Calculus
- Advanced Placement Statistics
- Advanced Placement Chemistry
- Advanced Placement Biology
- Advanced Placement Physics
- Advanced Placement Environmental Science
- Any PLTW Course
- German Courses

*Programs available at the middle school result in some students arriving with math credits while others will need to take additional math at the high school to prepare them for the rigor of college programs.*

\*CTE Completer

\*\*Accelerated Credit

### **Williamsport High School STEM Faculty**

#### **Science Department**

Ms. Hughes-Department Leader  
Mrs. DeTora  
Ms. Dunham  
Ms. Flowers  
Mrs. Gainor  
Dr. Henry  
Mr. Nystrom

#### **Career Technology Education Department**

Mr. Shook-Department Leader  
Mr. Hoopengardner  
Mr. Arthur

#### **Mathematics Department**

Mr. Rubeck-Department Leader  
Ms. Clark  
Ms. Finafrock  
Mrs. Kaltenbaugh  
Mr. Lindstrom  
Mr. Shriver  
Mrs. Wood  
Mrs. Yoder

#### **Guidance Counselor**

Mr. Longnecker

- Applications are available in your school's guidance office.
- Applications are due to Williamsport High School by March 1<sup>st</sup>.
- Notification of acceptance will be in June.