

*"In college, I intend to major in public health as I want to become a pediatrician. My enrollment in biomedical classes has definitely impacted my college choice because I realized over my high school career that I love science (especially chemistry), and I find it very fascinating. The Biomedical Pathway in the Scholars Program has definitely prepared me for college, and I feel that I'm ready to take on any college classes in the near future."*

—RAPHAEL  
CIVIL '19

# Scholars Program

*Featuring curriculum from the nationally recognized program,*

**Project Lead the Way**



**St. Mary's Ryken**

*A College Preparatory Catholic High School  
Located in the Heart of Leonardtown, Maryland*



The St. Mary's Ryken Scholars Program offers accelerated curriculum concentrations to our students who want a more rigorous and advanced course of study.

The SMR Scholars Program offers STEM pathways in:

- Biomedical Science
- Computer Science
- Engineering

The SMR Scholars Program offers the following Humanities pathways:

- Global and International Studies
- Humanities
- Performing Arts
- Visual Arts

## Selection Process

To be selected for the Scholars Program, the Admissions Team and Dean of Academics will evaluate the following criteria:

- Student's high school placement test results
- Grade-point average
- Portfolio or audition (Visual and Performing Arts pathways)
- Interview with the Dean of Academics may also be required

**FOR ADDITIONAL INFORMATION AND QUESTIONS, PLEASE CONTACT:**

Mrs. Sue Allison, Academic Coordinator  
[susan.allison@smrhs.org](mailto:susan.allison@smrhs.org) / 301-475-7681



Brennan Hudson '18 completed the STEM pathway and is attending the United States Military Academy at West Point.

# Scholars Program Pathways

## STEM ENGINEERING

### PLTW REQUIREMENTS

- Introduction to Engineering Design
- Principles of Engineering
- Aerospace Engineering
- Engineering Design and Development (Senior Capstone)

### MATH AND SCIENCE REQUIREMENTS

- Honors level prerequisite Math/Science courses
- AP Calculus
- AP Chemistry and/or AP Statistics
- AP Physics C
- MATLAB (senior year)

## STEM COMPUTER SCIENCE

### PLTW REQUIREMENTS

- Computer Science Essentials
- AP Computer Science Principles
- AP Computer Science
- Cybersecurity

### OTHER REQUIREMENTS

- Intro to Programming and/or Web Development
- Honors level prerequisite Math/Science courses
- AP Calculus
- AP Statistics
- AP Science (Chemistry, Biology, Physics, or Environmental)
- *Digital Knights Competitive Programming Team*

## STEM BIOMEDICAL

### PLTW REQUIREMENTS

- Principles of Biomedical Science
- Human Body Systems
- Medical Interventions
- Biomedical Innovation (Senior Capstone)

### MATH AND SCIENCE REQUIREMENTS

- Honors level prerequisite Math/Science courses
- Honors Physics
- AP Biology
- AP Calculus
- AP Chemistry or AP Statistics

## GLOBAL AND INTERNATIONAL STUDIES

- AP Human Geography
- AP World History
- AP U.S. History
- AP U.S. Government & Politics
- AP Macroeconomics
- AP Microeconomics
- World Language (through a fourth/AP year)
- AP Research
- AP Seminar

## HUMANITIES

- AP Language & Composition
- AP Literature & Composition
- AP World History
- AP U.S. History
- AP Psychology
- AP Art History
- World Language (through a fourth/AP year)
- AP Research
- AP Seminar

## VISUAL ARTS

### REQUIREMENTS

- Introduction to Visual Art
- Drawing
- Painting
- Studio I
- Photography
- Graphic Design
- AP Art History
- AP Studio Art
- Honors Intro to Human Anatomy
- AP Language & Composition

### OTHER REQUIREMENTS

- National Fine Arts Honor Society
- Summer Portfolio Development

## PERFORMING ARTS

### REQUIREMENTS

- Performance Group (four years)
- Music/Theatre/Art Appreciation
- AP Language & Composition
- AP English Literature
- Fine Arts Electives

### ADDITIONAL REQUIREMENTS FOR DANCE

- Health and Nutrition
- Honors Intro to Human Anatomy
- Dance Honor Society

### ADDITIONAL REQUIREMENTS FOR THEATRE

- Stage Guild
- Technical Theatre
- Two productions per year

### ADDITIONAL REQUIREMENTS FOR MUSIC

- AP Music Theory
- Tri-M Music Honors Society
- WATMC Honors Band/Orchestra

## Project Lead the Way

The STEM curriculum uses Project Lead the Way (PLTW), the nation's leading provider of STEM programs. PLTW's success in preparing students to succeed has been recognized by colleges and universities.

### BENEFITS OF THE SMR SCHOLARS PROGRAM INCLUDE:

- Participation in a selective academic program with specialty pathways
- Flexible scheduling to allow for Scholars electives
- Exclusive field trips
- Capstone senior project with presentations to area professionals with consultation and feedback
- Distinguished addition for college applications
- Recognition at graduation and Scholars Program diploma
- Internship opportunities with local companies and organizations