



STEM

Science
Technology
Engineering
Mathematics

The Academy at Morristown High School

STEM CURRICULAR PATHWAYS

** All STEM Academy students will be required to complete a foundational Integrated STEM course along with electives from one designated STEM pathway. Students may choose electives from their designated pathways to fulfill their STEM Academy requirements. **A minimum of 20 STEM elective credits is required to successfully complete the academic requirements of the STEM Academy program!***

** Designation of a STEM pathway of study will be determined **sophomore year** after the successful completion of **Integrated STEM**. Each STEM pathway provides the student an option of enrollment in **Design Studio or Research Science I/II**, which provides the opportunity for an independent study, scientific research, or manufacturing in a desired area.*

** Students may take STEM elective courses across multiple pathways upon meeting with their guidance counselors and the STEM directors.*

** Project Lead The Way certified classes are designated with – (PLTW)*

** Dual credit courses offered through Rutgers University are designated with – ®*

BIOMEDICAL PATHWAY

CORE SCIENCES

Integrated STEM, Physics, Chemistry, Biology

STEM ELECTIVES

Dynamics of Healthcare ®	AP Biology
Medical Terminology ®	AP Chemistry
Anatomy & Physiology ®	AP Psychology
Forensics	Neuroscience
* Research Science I	* Research Science II
* Design Studio	

ARCHITECTURE PATHWAY

CORE SCIENCES

Integrated STEM, Physics, Chemistry, Biology

STEM ELECTIVES

CAD 1: Computer Aided Design	CAD 2: Architectural Design
Wood Design I-IV	Visual art 1
Drawing	AP Art Studio
* Research Science I	* Research Science II
* Design Studio	

ENGINEERING PATHWAY

CORE SCIENCES

Integrated STEM, Physics, Chemistry, Biology

STEM ELECTIVES

Engineering & Robotics I/II CAD 2: 3D CAD & Engineering

Principles of Engineering (PTLW) AP Physics

Aerospace Engineering (PLTW) AP Calculus

Nanoscale Science & Engineering Wood Design 2/3

*** Research Science I * Research Science II**

*** Design Studio**

COMPUTER SCIENCE PATHWAY

CORE SCIENCES

Integrated STEM, Physics, Chemistry, Biology

STEM ELECTIVES

Computer Science Essentials (PLTW) Cyber Security (PLTW)

AP Computer Science Principles (PLTW) AP Physics

AP Computer Science A (PLTW) Engineering & Robotics II

*** Research Science I * Research Science II**

*** Design Studio**

ENVIRONMENTAL SUSTAINABILITY PATHWAY

CORE SCIENCES

Integrated STEM, Physics, Chemistry, Biology

STEM ELECTIVES

Engineering & Robotics I

AP Environmental Science

Alternate Energy & Sustainable Design Environmental Science

AP Biology

Marine Biology

*** Research Science I**

*** Research Science II**

*** Design Studio**

MATHEMATICS PATHWAY

CORE SCIENCES

Integrated STEM, Algebra 1/2, Geometry, Pre Calculus

STEM ELECTIVES

AP Calculus AB

AP Calculus BC

AP Statistics

Linear Algebra

AP Physics C

*** Research Science I**

*** Research Science II**

*** Design Studio**