SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS
STEM

During 8th grade students with interest in following a career path in the biomedicine, engineering or information technology fields will be encouraged to enroll in an arts course, Introduction to Engineering Design, or Honors Computer Programming respectively as well as Personal Finance/Economics during their freshman year. This will provide them with some initial exploration in this area.

Ninth grade students interested in this academy that meet the academic requirements [minimum GPA], and are willing to commit to meeting the rigors of academic goals and proposed schedule may apply to the academy. The application process will include a written assessment and interview with STEM academy teachers.

Students accepted into the program are expected to remain part of the program for the next 3 years, participate in extra curricular activities related to the field such as Computer Club, Red Cross Club, Science Club, Technology Club and Matheletes/Scienceletes and complete both an internship and capstone project during their senior year.

Core content classes are pre-selected for the students and their elective courses may be selected from a pre-determined list of courses that create a specialized learning path.

Areas of Focus:

Biomedical   **Engineering**
Information Technology

Some of the core content courses in this program include:
Honors World History ~ Honors Language Arts ~ Honors Algebra II ~ Spanish

Some of the elective courses in this program include:
Intro to Engineering Design ~ Civil Engineering & Architecture ~ CADD
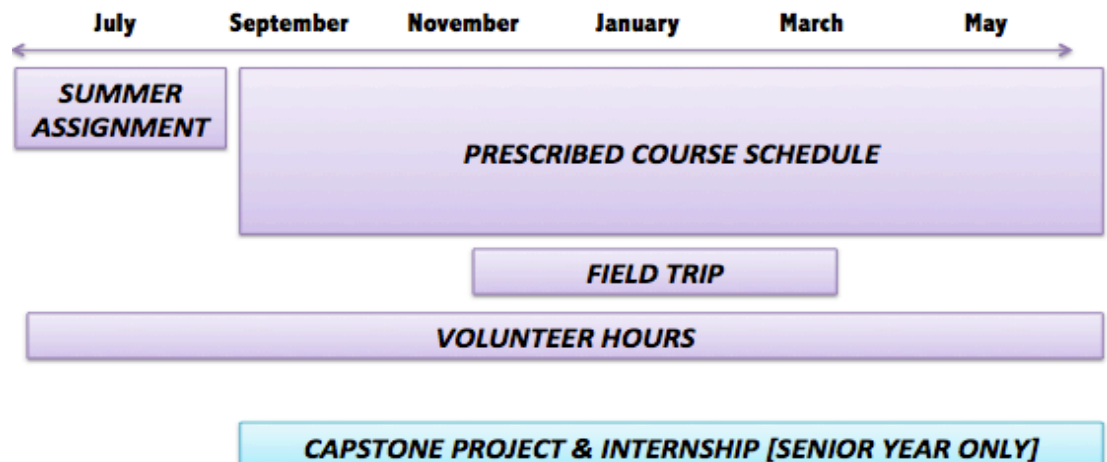*IOS Application Development ~ Advanced Web Design*

Some of the accelerated courses in this program include:
Honors Computer Programming ~ AP Computer Programming
Honors Anatomy & Physiology ~ AP Biology ~ AP Chemistry
AP Anatomy & Physiology ~ AP Calculus

Career Academy Student Experience

10th – 12th Grade
* Minimum GPA required to remain in the program.

| July | September | November | January | March | May |

SUMMER ASSIGNMENT

PRESCRIBED COURSE SCHEDULE

FIELD TRIP

VOLUNTEER HOURS

CAPSTONE PROJECT & INTERNSHIP [SENIOR YEAR ONLY]

Goals of Career Academies

Provide Learning Paths

Students that have strong interest and aptitude in a specific career path can elect a specialized learning path rich in cross-curricular experiences in that area. Students that would like to continue to explore a variety of career interests would choose electives and courses that support their exploration.
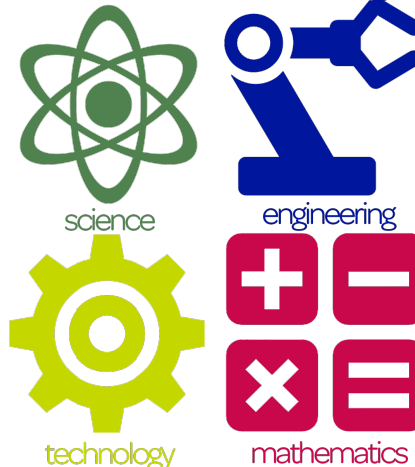
Enable Small Learning Communities

Small learning communities, similar to workplace environments, will provide the platform for project-based learning experiences that deepen knowledge.

Empowered Relationships

Strong bonds of camaraderie within the academy and with faculty that create comfort in exploring academics and preparation for a career area. The mentor-mentee experience will allow students to grow and develop in a way that mirrors workplace growth.

Culminating Experience

Students will complete a capstone project while working with a mentor during their senior year. This project will be a custom experience for each student that allows them to utilize and apply the knowledge they have gained in authentic environment.

science

engineering

technology

mathematics

For more information, see your Guidance Counselor or email the Academy Administrator at smadreperla@monroe.k12.nj.us

MTHS CAREER ACADEMIES

SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

FRESHMAN – Freshman Class
FLEX – Flexible Scheduling
BLG – Business, Law & Government
CA – Communication and the Arts
STEM – Science, Tech., Engineer. & Math