

FMS is one of the only middle schools to offer cutting edge electives designed to prepare students for future success.

Navigating Digital Systems is a required 6th grade elective in which each student will navigate digital systems, master innovative technologies and be equipped with the tools to be productive learners in a changing world. In this course, students will understand and use technology systems and select and use applications productively with a focus on the following topics:

- Digital Citizenship
- Online safety and Security
- Best Practices in Chromebook Use/Care
- Educational Productivity Apps and Extensions
- Online productivity

The three-year iStem path at FMS features a sequence of electives designed to build on one another.

6th Grade ELECTIVE:

Foundations of STEM

Foundations of STEM will provide students with the ability to design and create solutions to real-world problems by applying the design process. Students will develop an understanding of the impact of technology on society throughout history as well as its relationship to our modern world.

- Introduction to the Design Process
- Problem Solving
- Introduction to Coding
- Prototyping
- Testing and Evaluation
- Technology and Society
- Hands-on Learning

7th grade Cycle:

Engineering Innovations

Engineering Innovations will challenge students to apply a variety of engineering tools and concepts in conjunction with the design process to further refine and develop their problem solving skills.

- Introduction to 3D Design
- 3D Printing

- Transportation Technologies
- Problem Solving
- Hands-on Learning
- Prototyping
- Coding
- Sustainability in Design

8th grade Cycle:

Integrated Robotics and Engineering Design

Integrated Robotics and Engineering Design will provide students with the opportunity to tackle real-world problems in the realm of technology. Students will use skills in robotics and engineering to accomplish a wide variety of design challenges and understand the role of troubleshooting, research and development, invention and innovation, and experimentation in problem solving.

- Ethics of Technology
- Biomedical Technologies
- 3D Design
- 3D Printing
- Robotics