CYBER FUNDAMENTALS
Cyber Fundamentals engages students in the foundational concepts of cyber, coding, and robotics, as well as block-based and text-based programming through the micro:bit™ and the cyber:bot™.

CYBER LITERACY
Cyber Literacy uses a robotics platform to build strong cyber foundations and introduce the opportunities, threats, responsibilities, and legal constraints associated with operating in cyberspace. Cyber Literacy is an ideal course to lay the foundation for further exploration into STEM and cyber-related topics.

- Electricity
- Programming
- Networking
- Critical Thinking Skills

CYBER LITERACY 2
Cyber Literacy 2 builds upon fundamental cyber skills developed in Cyber Literacy and takes students deeper into the world of cyberspace. Students construct complex systems with robotics and explore connections between humanities concepts and today’s technologies.

- Systems Engineering
- Liberal Arts

CYBER SOCIETY
Cyber Society uses liberal arts concepts to increase cyber awareness among high school students. Students pull information from articles and other sources as they practice presentation skills and participate in debates and analyze cyber-based scenarios.

- Cyber Law
- Cyber Ethics
- Cyber Terrorism
- Cyber Communities
- Cyber Business

CYBER SCIENCE
Cyber Science uses a robotics platform to cover advanced cyber concepts. Students engage in problem-solving using robotics and computer science and liberal arts connections provide a holistic view of how to be a better cyber citizen.

- Programming Basics
- Foundations of Computer Science
- Networking & Security
- Artificial Intelligence
- Ethics & Social Issues

COMPUTER SCIENCE
Computer Science is an immersive exploration of computer science through the Raspberry Pi®. The high-level goals of the curriculum are to (1) Expose students to the beauty of computer science through discovery; (2) Show how computer science can be used to solve hard problems; and (3) Cultivate problem solvers who are comfortable tackling hard problems. Lessons are mapped to the AP Computer Science Principles curriculum.

- Algorithms
- Computer Programming
- Data Structures
- Computer Architecture

Continued on reverse
ADVANCED MATH
Advanced Math is an upper-level math course that prepares students for further study in STEM fields. Students research mathematics history, compare and contrast parallel ideas, and communicate mathematics through formal written responses while applying mathematical concepts.

- Two-Dimensional Coordinates
- Introduction to Linear Algebra
- Three-Dimensional Coordinates
- Fundamentals of Mathematics

PHYSICS
Physics is a rigorous course that develops understanding of the science, technology, engineering, and mathematics used by STEM professionals. A robotics platform is used to drive physics fundamentals. Lessons are mapped to the AP curriculum.

- Electricity & Magnetism
- Work & Mechanics
- Light & Optics
- Waves & Sound
- Thermal Fluids & Heat Transfer

ALGEBRA 1
Algebra 1 focuses on algebra fundamentals and explores their scientific, technological, engineering, artistic, and mathematical applications. Students present solutions to mathematics problems as well as application-specific problems for a context-based learning experience.

- Linear equations & functions
- Quadratic equations & functions
- Exponential equations & functions
- Basic statistics

A+ CERTIFICATION PREP
This course prepares students for the CompTia A+ certification exam, which provides IT professionals with an internationally recognized IT credential. The course covers the most common hardware and software technologies and prepares students to support complex IT infrastructures.

COMPUTATIONAL THINKING - Coming soon
Computational Thinking incorporates the four elements of computational thinking as well as the Engineering Design Process to master grade level standards within core subject areas. Modules provide guidance on how to embed computational thinking vocabulary into everyday learning experiences.

- Decomposition
- Pattern recognition
- Abstraction
- Algorithm design

CYBERSECURITY FUNDAMENTALS - Coming soon
Cybersecurity Fundamentals covers the basics of protecting internet-connected systems from passive vulnerabilities as well as active cyber attacks.

CRYPTOMATH - Coming soon
Cryptomath is an advanced course that provides an introduction to the mathematics involved in the field of cryptology - the study of writing and solving codes.
STEM: Explore, Discover, Apply (STEM EDA) engages middle school students through hands-on projects that integrate the Engineering Design Process, allowing students to creatively explore STEM through design.

This multi-grade curriculum utilizes liberal arts disciplines to add meaning and depth to the content. Through STEM EDA, students develop invaluable skills focusing on leadership, team building, creativity, and communication.

- Egg Drop
- Volcanoes
- Music
- Catapults
- Alternative Energy
- Electricity
- Aerospace
- Earthquakes
- Roller Coaster
- Cars
- Genetics
- Coding

CYBER FUNDAMENTALS
Cyber Fundamentals introduces students to the foundational concepts of coding and robotics through project-driven, hands-on modules. By integrating the micro:bit™ and the cyber:bot™, students learn the basics of block-based and text-based programming and how they interact with sensors and robots. Cyber Fundamentals also explores the idea of a cyber society through liberal arts and technology crossovers.

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STEAM FUNDAMENTALS

STEAM Fundamentals is a phenomenon-based, hands-on science curriculum designed to engage elementary students in real-world applications.

Each module is centered around an anchor phenomenon which encourages students to ask questions about the natural world. As they seek answers to their questions, students make observations, gather information, and design investigations to test their ideas. Students learn to work in teams, engage in critical reflection, and share their ideas through speaking and writing.

Our Approach: Phenomenon-Based Learning

**Step 1. Phenomenon**

Explore the world around you.
Ask a question.

**Step 2. Gather Information**

Make observations.
Conduct research.
Design investigations.

**Step 3. Draw conclusions**

Make a claim.
Use evidence and reasoning to support your claim.

COMPUTATIONAL THINKING  -  Coming soon

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- Abstraction
- Algorithm design