

Reedy Creek Magnet Middle School: What is Digital Sciences?

Is Computational Thinking the only thing that makes RCMMS a Digital Sciences School? No!

Our theme is comprised of **Computational Thinking + Magnet Electives** along with a focus on the responsible use of digital tools and technology in the classroom, support of coding and computer science concepts in the learning environment, and opportunities for students to work with our business, community, and higher education partners.

Our exclusive (not taught anywhere else and written specifically for Reedy Creek) electives are:

Robotics and Mechatronics 1: Students learn and practice the fundamentals of robot operation and programming, including the study of basic electrical concepts and components, sensors that provide data, and programming techniques to control robot behavior.

Robotics and Mechatronics 2: Students learn about Arduino microcontrollers, Raspberry Pi mini computers, and how these devices are used in robots, smart devices, and other applications. Students gain experience with different software, and they'll study the Internet of Things.

Robotics and Mechatronics 3: Students explore ways to use Arduino microcontrollers and Raspberry Pi mini computers in more complex projects, and they are introduced to biomedical engineering and drone technology.

Bits & Bytes: Through hands-on activities and investigations, students will learn the foundations of computer science and computational thinking, including binary numbers, non-linear problem solving, algorithms, artificial intelligence, image types, and how humans interface with computers.

Emerging Technologies: This course defines emergent technology and teaches skills to help students keep pace with a rapidly changing technological society. Topics include networking, app development, sustainable technology, and an investigation of tech-related social issues.

