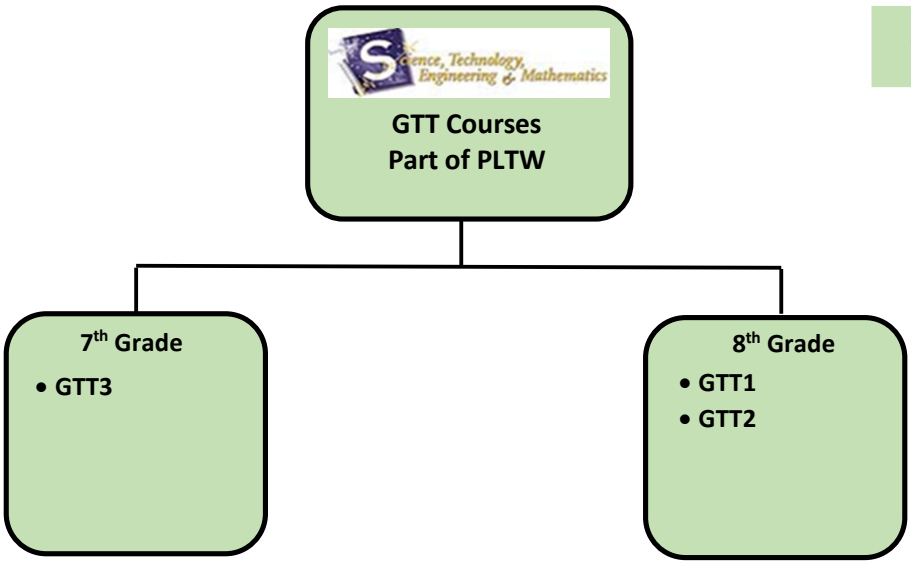
STEM at DRMS



Gateway to Technology III

Grade 7 **½ Credit for High School**

Students complete two Project Lead the Way curriculum units:

Energy and the Environment: Student are challenged to think big and toward the future as they explore sustainable solutions to our energy needs and investigate the impact of energy on our lives and the world. They design and model alternative energy sources and evaluate options for reducing energy consumption.

Flight and Space: The excited world of aerospace comes alive as students explore the science behind aeronautics and use their knowledge to design, build, and test an airfoil. Custom-built simulation software allows students to experience space travel.

Gateway to Technology I

Grade 8 **½ Credit for High School**

Students complete two Project Lead the Way curriculum units:

Design and Modeling: Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

Automation and Robotics: Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

Gateway to Technology II

Grade 8 **½ Credit for High School**

Students complete two Project Lead the Way curriculum units:

Science of Technology: Science impacts the technology of yesterday, today, and the future. Students apply the concepts of physics, chemistry, and nanotechnology to STEM activities and projects, including making ice cream, cleaning up and oil spill, and discovering the properties of nano-materials.

Magic of Electrons: Through hands-on projects, students explore electricity, the behavior and parts of atoms, and sensing devices. They learn knowledge and skills in basic circuitry design, and examine the impact of electricity on the world around them.