



CTE Courses at DRMS, Garfield, and New Tech Middle Schools

Principles of Information Technology (w/College & Career Readiness)

Grade 8

1 High School Credit

In Principles of Information Technology, students will develop computer literacy skills, including keyboarding, to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

Students will follow college and career readiness curriculum to identify and investigate careers of interest. They will explore colleges and careers in depth to identify the best path for themselves and will use that knowledge to develop a four-year plan for high school (which is a requirement before entering 9th grade).

Science, Technology, Engineering, & Mathematics (STEM) Courses

The courses below are part of the Project Lead the Way curriculum which is used in the 9th through 12th grade level Engineering courses at DRFS and DRHS.

Principles of Applied Engineering

Grade 7

1 High School Credit

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.

Engineering Essentials

Grade 8

1 High School Credit

Students explore the breadth of engineering career opportunities and experiences as they solve engaging and challenging real-world problems like creating a natural relief center system or creating a solution to improve the safety and well-being of local citizens.