

Elective Class	Grade Offered	Description
Exploring Tech/Engineering	7th & 8th Grade	Exploring Technology/Engineering 7 addresses the development of technology and how it is changing our world. Students learn to use technology-related tools including computers, lasers, telecommunication equipment, transportation systems, production equipment, robots, wind tunnels. Engineering concepts are also integrated throughout the course. Student projects will align with The Design Cycle (Investigate, Plan, Create, Evaluate) for both student design and evaluation. Safe and proper use of equipment will be integrated in the course.
Applying Tech/Engineering	8th Grade	Applying Technology/Engineering 8 is an opportunity for students to further their knowledge of STEM related areas. It provides students with a chance to expand on information they've gained in previous classes in areas such as computer applications, robotics, transportation and work both individually and as teams in STEM areas. In this class students will explore, research and develop applications for future technologies. This class is important for students wishing to continue in the technology education program at the high school level. Student projects will align with The Design Cycle (Investigate, Plan, Create, Evaluate) for both student design and evaluation. Safe and proper use of equipment will be integrated in the course.
Robotics 1	7th Grade	Robotics Engineering 1 is a semester long class designed to introduce the basics of robotics as it teaches science technology engineering and mathematics (STEM). Students will learn how to use information from sensors, applied mathematics and measurement to program their robot to perform in a series of environments. They will have the opportunity to complete multiple investigations involving guided research, problem solving, working in teams and documenting what they've learned as they investigate how robots make decisions to navigate their environment. As students become familiar with the programming and the NXT hardware, they may progress at their own pace allowing for differentiation in student abilities and learning styles. Interactive, hands-on learning is the structure of this class. This course is a pre-cursor to the high school robotics program and a part of the K-12 robotics articulation.
Robotics Engineering 2	8th Grade	Robotics Engineering 2 is an interactive, hands-on learning environment. Students will explore the firmware programming language and robotic construction techniques while building, testing and improving their designs. The robots will be equipped with touch, sonar, light and optical sensors that will be used in maneuvering the robot about. Student programmed robots will then be capable of navigating a predetermined obstacle course and completing various designated tasks. We will use the Tetrix building system for this class.

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Woods Crafts	7th & 8th Grade	Woods Crafts is a hands-on course designed for students to learn the processes and skills to produce quality wood projects. Students will learn measurement, basic joinery, project layout, materials calculation, hand and power tools, basic lamp wiring, construction and finishing techniques. Projects may include a lamp, table, shelving unit, carving project, basic box, bird houses stool, and a lathe project. Creative use of project design and materials is stressed. An emphasis is put on critical thinking, problem solving and quality of work. Safe and proper use of equipment will be integrated in the course.
Game Programming Digital Tech	8th Grade	Take your knowledge of computers and programming to the next level with this course. Digital citizenship, multimedia and presentation, research, data collection and analysis, information literacy, online research, and computational thinking will be explored through creative projects. Computational thinking and logical problem solving are a focus throughout the course.
Web Design/Comp Animation	8th Grade	Have fun publishing for the web while learning techniques in image editing, design, animation, HTML programming, and web design. This course will incorporate 21st century skills while working collaboratively to design and create innovative digital works. Careers and life-long learning opportunities will be explored.
Digital Design	8th Grade	This course offers further development of the elements of art and the principles of design. A wide variety of art activities are designed to increase the student's knowledge of art media techniques terminology and appreciation of aesthetics and art styles. Critical thinking skills are emphasized as students do drawings paintings sculpture printmaking ceramics fiber projects and computer graphics.
Art 1	7th & 8th Grade	This course offers further development of the elements of art and the principles of design. A wide variety of art activities are designed to increase the student's knowledge of art media techniques terminology and appreciation of aesthetics and art styles. Critical thinking skills are emphasized as students do drawings paintings sculpture printmaking ceramics fiber projects and computer graphics.
Art 2	8th Grade	This course allows students to further develop their creative ideas and interests with more involved projects. A greater emphasis is placed on art aesthetics and critical evaluation. Art elements and principles of design continue to be reinforced as students are introduced to new art concepts art history media and techniques.

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Jewelry	8th Grade	The students will observe and interpret metals and nonmetals through experimentation. Planning of designs utilizing the skills of sawing forging cold connections soldering casting surface enrichment and other beginning jewelry techniques may be explored. The history and aesthetics of jewelry will be studied. Wire metal (nickel silver brass copper and sterling silver) wood fibers and stones may be used. The process of casting is also introduced. Design and craftsmanship are emphasized. Drawing is strongly recommended before taking the course. Student supplies kit and/or fees required.
Pottery and Sculpture	7th & 8th Grade	Pottery and Sculpture is a one-semester class directed toward introducing students to three-dimensional methods of creating art. The class begins by studying the element and principles of design and how they are applied to 3-D works of art.
History of Rock & Roll	8th Grade	This course is an introduction to the evolution of rock styles contributions of important performers and musical techniques involved in the creation and performance of rock music. Students will be introduced to the history of rock and roll music as it evolved in the United States and spread throughout the world.
Journalism & Newspaper	7th & 8th Grade	This semester elective is designed to introduce students to the basic skills involved in the publication of a newspaper. Topics include journalistic style editing interviewing layout and design and the responsibility of the press. Emphasis is placed on news writing and on meeting deadlines. Students should be interested and capable writers.
Adventure Ed	7th & 8th Grade	Adventure Ed an elective designed to promote lifelong fitness. Students will be introduced to a variety of sports and activities that promote an active healthy lifestyle such as Ultimate Frisbee Frisbee Golf Street Hockey Biking Rock Climbing Capture the Flag Kayaking and SCUBA diving. Students will be required to wear clothing appropriate for the activities. **Activities taught varies by school**