

# INDUSTRIAL TECHNOLOGY

\*Some Industrial Technology classes include a fee.  
Please see individual description for more information.

## AUTO MAINTENANCE

<b>Grade Level:</b> 10-12	<b>Credits:</b> 1	<b>College Credit:</b> No	<b>Fine Arts Credit:</b> No	<b>Prerequisite:</b> None
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Students will learn the principles and parts of the automobile engine, chassis, drive trains and body. This is an introductory maintenance class, not an advanced automotive mechanics course. Students will perform routine maintenance and repairs on their own vehicle. This course will explore and provide experiences for a variety of career possibilities. There will be several hands-on competitions. \*This class includes a \$20 contribution.

## CABINETRY AND FURNITURE MAKING

<b>Grade Level:</b> 10-12	<b>Credits:</b> 2	<b>College Credit:</b> No	<b>Fine Arts Credits:</b> 2	<b>Prerequisite:</b> Wood Technology or Permission
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This course gives students an opportunity to construct quality furniture of their own choice. Along with project construction study will include: skill in the operating of woodworking machines, advanced techniques in construction, finishes, plastics and computer calculations. Project examples: desk, cedar chest, gun chest, gun cabinet, vanity, kitchen cabinets. \*There is a contribution for this course. Cost will vary based on individual projects.

## ELECTRICITY/ ELECTRONICS

<b>Grade Level:</b> 10-12	<b>Credits:</b> 1	<b>College Credit:</b> No	<b>Fine Arts Credit:</b> No	<b>Prerequisite:</b> None
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The Electricity unit is designed to give students a background in residential wiring through the use of scaled examples and lab activities. Electronics unit will cover the principles of basic electronics. Students will assemble and use lab activities to understand the basic principles of electronics such as: magnetism, circuits, transistors, and integrated circuits. \*This class includes a \$40 contribution.

## ENTREPRENEURSHIP

<b>Grade Level:</b> 9-12	<b>Credits:</b> 1	<b>College Credit:</b> No	<b>Fine Arts Credit:</b> No	<b>Prerequisite:</b> None
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Students will learn the challenges of starting and running a business as they set up their own company for production of a product(s) for sale to earn money as they learn. Students will have experience with company structure, finances, marketing, and personnel management. Students will invest in their own company and investments will vary.

## INTRODUCTION TO CONSTRUCTION

<b>Grade Level:</b> 9-12	<b>Credits:</b> 1	<b>College Credit:</b> No	<b>Fine Arts Credit:</b> No	<b>Prerequisite:</b> None
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Students will be introduced to the construction field with the main emphasis on residential construction. The focus will be to provide students with basic information and skills in the construction field. Learning will include class work, visual demonstrations and project experience. Students will have a basic experience to help them continue their education in the construction field or a Technical/Trade College program. The class is designed to help students become more employable in the construction field.

## INTRODUCTION TO METALS

<b>Grade Level:</b> 9-12	<b>Credits:</b> 1	<b>College Credit:</b> No	<b>Fine Arts Credit:</b> No	<b>Prerequisite:</b> None
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This course is designed to develop introductory skills in arc and gas welding, lathe operations, CNC and sheet metal fabrication as related to metal production. Each student will construct a variety of projects in each area. \*This class includes a \$40 contribution.

## INTRODUCTION TO WOODS

<b>Grade Level:</b> 9-12	<b>Credits:</b> 1	<b>College Credit:</b> No	<b>Fine Arts Credit:</b> No	<b>Prerequisite:</b> None
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This course gives an introduction to woodworking machine skill and safety. Wood materials and processes in construction will be studied while students build a simple wood project using basic construction methods. \*This class includes a \$50 contribution.

## METALS TECHNOLOGY

<b>Grade Level:</b> 10-12	<b>Credits:</b> 2	<b>College Credit:</b> No	<b>Fine Arts Credits:</b> 2	<b>Prerequisite:</b> Introduction to Metals or Permission
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Each student will construct several required and self-selected projects using advanced metalworking processes. Specialized areas will include computer aided machining, and mill lathe, thermo plasma cutter, mig welding, arc and gas welding. Approximately 70-80% of the class is hands-on. \*This class includes a \$40 contribution for Part A. The contribution for Part B varies based on individual projects.

## SMALL ENGINES

<b>Grade Level:</b> 9-12	<b>Credits:</b> 1	<b>College Credit:</b> No	<b>Fine Arts Credit:</b> No	<b>Prerequisite:</b> None
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Small engines theories of operation, tools and repair procedures will be covered giving students basic knowledge of 2 and 4 stroke cycle engines. Approximately 60%-70% of the class is hands-on repairing and working in the lab. The study of power includes the study of simple machines, hydraulics, and transmissions. \*This class includes a \$20 contribution.

## WOODWORKING TECHNOLOGY

Grade Level: 9-12

Credits: 1

College Credit: No

Fine Arts Credit: No

Prerequisite: None

This class gives students an opportunity to construct a medium size wood project. Students will develop skill in operating woodworking machines, use materials, and techniques in construction of a quality wood cabinet. \*This class includes a \$125 contribution.

Interested in a career in science, math, technology, or engineering? Check out Project Lead the Way course offerings in this registration guide.