

## Industrial Arts



### Woodworking I

*Credit: .5*

*Weighting: 0*

#### **Course Description**

Introduction to Woodworking will provide students with foundational skills for a limitless future of recreational or professional woodworking and carpentry. Students will learn shop safety, measuring skills, the safe operation of hand and power tools, as well as woodworking basics. They will work hands-on to create projects out of wood, as well as reimagine pre-built pieces. Students will work with both reclaimed and new wood and lumber and explore a variety of joinery options.

#### **Course Requirements**

*None*

### Woodworking II

*Credit: .5*

*Weighting: 0*

#### **Course Description**

This class will prepare students for a variety of careers in the building and construction field. Students will continue to expand their knowledge and expertise using hand and power tools. Further, students will learn about building materials for framing, window and door construction, and finish work. Students will work collaboratively on class projects with real world applications and use.

#### **Course Requirements**

Prerequisite: Woodworking I

### Construction III

*Credit: .5*

*Weighting: 0*

#### **Course Description**

This class prepares students to apply technical knowledge and skills to lay out, fabricate, erect, install, and repair wooden structures and fixtures using hand and power tools. The program also includes instruction in areas such as common systems of framing, construction materials, estimating, blueprint reading, and finish carpentry techniques.

#### **Course Requirements**

Prerequisite: Woodworking I and II

**Home Repair**

*Credit: .5*

*Weighting: 0*

**Course Description**

This class prepares students to apply technical knowledge and skills to address general home repair tasks incorporating skills in the areas of plumbing, electric, and construction.

**Course Requirements**

Prerequisite: Woodworking I and II

**Building Trades**

*Credit: 2.5*

*Weighting: 0*

**Course Description**

Building Trades provides basic technical knowledge and safety skills to begin preparing students for a career in the field. Students will learn about the importance of safety and personal protection in all aspects of construction. This program exposes students to the opportunities available in the architecture and construction industry, including occupations such as a carpenter, electrician, plumber, air conditioning technician, safety supervisor, architect, engineer, and other occupations. Students learn about the processes involved in construction projects and engage in a variety of small projects. Hands on lessons provide students with basic knowledge and skills required for construction of commercial, residential, and institutional structures. This program provides experiences and information (typically including career opportunities and training requirements) regarding construction-related occupations. Students engage in activities such as reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance.

At the completion of the Building Trades program, students will be able to apply the trade skills necessary for entry-level employment, apprenticeships and post-secondary education. Students will study and practice safety training, framing, roofing, door and window installation, hand and power tool use, concrete, masonry and bricklaying, blueprint reading, plumbing, electrical, and construction equipment and rigging. Students will learn the theory of the construction process and have the opportunity to put those theories into practice with authentic, hands-on, project-based activities. Students will also have the opportunity to earn the NCCER (National Center for Construction Education and Research) Construction Core as well as the OSHA 10 certifications, recognized throughout the construction industry as indicators that the individual is job ready.

**Course Requirements**

Prerequisite: Algebra, Entrance Application, Teacher Recommendations, and Interview