

TRADE AND INDUSTRY

PHIT220 Drafting

Level: 9-12
Credit: ½ unit

This class is an introduction to basic Computer Aided Drafting. (CAD) Students will learn to read and create different types of drawings, including orthographic projection and isometric. Students will learn basic dimensioning, lettering and plotting simple drawings. Students will also learn to use E-Cabinet design software Computer Aided Manufacturing (CAM) and design products in 3D. Proficiency in E-Cabinets is required to operate the CNC Router.

PHIT221 Intro to Industrial Technology

Prerequisite: Drafting

Level: 9-12
Credit: ½ Unit

This class is an introduction to Industrial Woodworking including: design, planning, cost estimation, construction, and finishing of products. Students learn the safe use of hand and power tools. Machine safety tests must be passed with 90% proficiency before students are allowed to work in the shop. Students will be assigned 3 projects to construct and will be required to produce plans and bill of materials for subsequent projects of their choosing. A shop fee is required.

PHIT310 Cabinet Making and Furniture Design 1

Prerequisite: Drafting and Intro to Industrial Technology or Wood 1

Level: 10-12

Credit: 1 Unit

This class builds on the skills acquired in Introduction to Industrial Technology. Students are introduced to basic cabinet design and construction. Course content includes: estimation, design, construction and installation of basic kitchen, bath and special cabinets. Students will also be introduced to basic CNC machining. There will be several assigned projects as well as student initiated projects. Class size is limited. A shop fee is required.

PHIT410 Cabinet Making and Furniture Design 2

Prerequisite: Cabinet Making and Furniture Design 1

Level: 11-12
Credit: 1 Unit

Students will gain experience operating a CNC Router. They will become familiar with programming, setup and operating the machine. This class is for the serious student with advanced woodworking skills. The class will design and manufacture custom cabinets for outside clients. Class size is limited. A shop fee is required.