

TECHNOLOGY EDUCATION



TECHNICAL DRAWING COURSES:

Technical drawing or “drafting” is the link between an idea or concept and the realization of a finished product. It is the language of technology -not only for those pursuing engineering or architecture as a profession, but for all professionals, consumers, and homeowners as well. The ability to read a technical drawing allows one to understand concepts at a level beyond word -whether one is a lawyer reviewing a patent case, a homeowner contemplating an addition, or anyone assembling something according to a drawing. The technical drawing classroom is equipped with 27 Computer-Aided Drawing (CAD) work stations. Classes are taught which provide all students with the latest technology available.

BASIC TECHNICAL DRAWING *Open to grades 9-12, no prerequisite.*



This the first course in the drafting sequence, open to all in grades 9 through 12 and it is the prerequisite for all other drafting classes. It develops the techniques of visual communication. This course offers a strong background in computer aided drawing and technical sketching, which helps to develop marketable skills, problem solving abilities, and a thorough understanding of the vocabulary of technical drawing. Many different CAD programs will be used for drawing problems in this class.

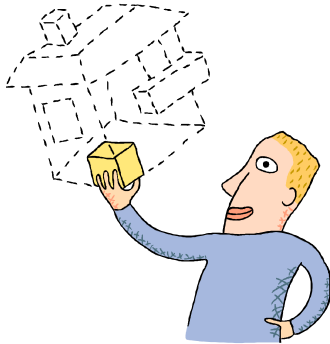
ENGINEERING DRAWING *Open to grades 10-12, prerequisite: basic*



technical drawing.

In this class, students learn the graphics of industry for engineers, manufacturers, and technicians. Emphasis is placed on AutoCAD, Rhino3-D, Sketchup 2-D and 3-D computer aided drawing and the different fields of engineering.

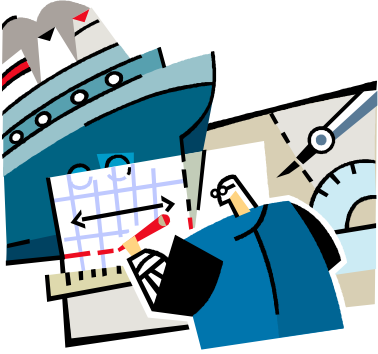
ARCHITECTURAL DRAWING *Open to grades 10-12, prerequisite: basic tech. drawing.*



Students design a house, and develop a complete set of working drawings necessary to construct it using CAD and/or manual drawing methods.

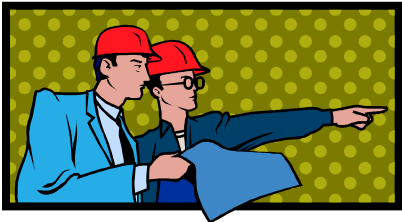
ADVANCED DRAWING *Open to grades 11-12, prerequisite: engineering or architectural drawing.*

This class increases students' experiences in engineering or architecture using advanced CAD, graphic, and presentation software. The three upper level courses are designed to accommodate a wide variety of interests and educational goals. Each of these classes takes the skills learned in basic drawing and develops them through a series of design problem solving activities which encourage students to use their imagination and creativity. Individualized instruction is emphasized, which allow students to progress at their own pace and decide how much they wish to accomplish each grading period. At the end of the year, students meet with professional engineer or registered architect to review their drawings and designs.



PRE- ENGINEERING *Open to grades 11-12, no prerequisite*

This course provides orientation to the careers and challenges of engineering. Students are actively involved with high-tech devices, robotics, engineering graphic software and math and science applications through problem solving experiences. Activities are provided in basic CAD drawing, materials science, technical design and models. Students work together and share ideas and solutions. The focus of the class is designing, building, testing and improving student engineered projects. There is a fee for the materials and projects used in this class only.



TOP TEN REASONS FOR TAKING...
TECHNICAL
DRAWING:

1. It develops basic drafting and sketching skills.
2. It will improve your basic math skills.
3. It meets the fine or practical arts requirement for graduation.
4. Students learn using the latest software available, the same programs the pros use.
5. Basic Technical Drawing is a prerequisite for Engineering and Architectural Drawing classes.
6. It is recommended for students interested in:

ENGINEERING ARCHITECTURE MANUFACTURING
COMPUTER AIDED DRAWING BUILDING CONSTRUCTION INTERIOR
DESIGN COMMERCIAL ART GRAPHICS
RENDERING PRODUCT DESIGN ORIGINAL DESIGNS

7. It can relieve college Engineering students from the many hours of work in required Engineering Graphics classes to devote more time to Calculus, etc.
8. Most colleges allow students to test out of required Engineering Graphics classes if they took Basic Technical Drawing in high school.
9. Many summer jobs and opportunities for after school employment are available for students with basic drafting skills.
10. All materials and supplies are provided at no charge.