

MECHANICAL DRAFTING (421)

Information provided includes course descriptions by subject only. For complete 2024-2025 programs/academic plans, please refer to Academic Programs (<http://catalog.blackhawk.edu/academics/>).

421-110 Interpreting Schematics for Manufacturing

Credits: 1

Interpreting Schematics for Manufacturing examines electrical symbols and diagrams, piping symbols and diagrams, hydraulic and pneumatic diagrams and symbols commonly found in the manufacturing industry.

Aid Code: 10 - undefined.

Co-requisites: (421-310)

Complete Course Listing

421-310 Print Reading for Manufacturing

Credits: 1

This course is designed to prepare students for reading prints in a manufacturing environment. In this course students will identify the purpose and function of different types of technical drawings, as well as proper drawing structure, techniques, and terminology.

Aid Code: 31 - undefined.

Complete Course Listing

421-380 Blueprint Reading(Welding)

Credits: 1-2

This course is designed to help the student acquire the ability to visualize spatial relationships between two and three view drawings. Introduction to machine and welding terminology and concepts is acquired by reading a series of prints. A study of welding symbols is covered. The course emphasizes training in visualization and factual information as a means of gaining a working knowledge of the interpretation of prints related to the welding or fabrication industry.

Aid Code: 31 - undefined.

Restrictions: Restricted to students admitted to Program.

Co-requisites: 804-306

Complete Course Listing

421-385 Blueprint Reading

Credits: 1-2

Blueprint reading is really learning a new language where much of it is presented in graphic or symbolic form. Students will learn about different types of drawings, proper drawing structure, and drawing terminology. They will learn to produce simple sketches and visualize two and three-dimensional parts. The experienced machine operator must be able to decipher blueprints in order to produce parts to proper specification.

Aid Code: 31 - undefined.

Complete Course Listing

421-390 Blueprint Reading Maintenance

Credits: 1-3

This course focuses on reading and interpreting blueprints, drawings and graphic symbols used in industry. Students will gain experience in the ability to visualize spatial relationships between single and multiple-view drawings. Time is spent interpreting actual blueprints. Students will be able to interpret a variety of prints such as machining, mechanical, or assembly prints.

Aid Code: 31 - undefined.

Restrictions: Restricted to students admitted to Program.

Complete Course Listing

421-401 Mech Drafting

Credits: 0.1-5

Aid Code: 47 - undefined.

Complete Course Listing

421-402 Drafting & Blueprint Reading

Credits: 0.2-6.4

Aid Code: 47 - undefined.

Complete Course Listing

421-404 Introduction to CAD

Credits: 0.2-3

Aid Code: 47 - undefined.

Complete Course Listing

421-405 Introduction To CAD II

Credits: 0.2-2.4

Aid Code: 47 - undefined.

Complete Course Listing

421-406 Auto Cad

Credits: 0.2-4

Aid Code: 47 - undefined.

Complete Course Listing

421-407 Interactive Auto CAD

Credits: 0.2-4

Aid Code: 47 - undefined.

Complete Course Listing

421-408 Blueprint Reading-Electrical

Credits: 0.1-2

Aid Code: 47 - undefined.

Complete Course Listing

421-409 Blueprint Reading-Mechanical

Credits: 0.1-4

Aid Code: 47 - undefined.

Complete Course Listing

421-410 Blueprint Reading-Machinist

Credits: 0.2-4

Aid Code: 47 - undefined.

Complete Course Listing

421-411 Blueprint Reading Machine 24

Credits: .6

This 24 hour course will teach beginning blueprint for Reading for Machines Define Terminology and abbreviations associated with the print reading Differentiate between drawing and prints Interpret the type of lines found on prints Interpret title blocks Interpret the layout of the views of an object Calculate tolerances on dimensions Interpret dimensions on print Sketch a simple object Dimension a drawing Draw an orthographic projection Interpret auxilliary view Interpret Sectional views Interpret Assembly drawings Analyze Machine details Interpret threaded screw component specifications .

Aid Code: 47 - undefined.

Complete Course Listing

421-412 Geometric Dimensioning

Credits: 0.1-3

Aid Code: 47 - undefined.

Complete Course Listing

421-413 Auto Cad-Intermediate

Credits: 0.2-4

Aid Code: 47 - undefined.

Complete Course Listing

421-414 Auto Cad-Mechanical Desktop

Credits: 0.1-3

Aid Code: 47 - undefined.

Complete Course Listing

421-415 Blueprint Reading-15

Credits: 1.5

This 15-hour course will focus on teaching students how to read and decipher information presented in graphic or symbolic form on blueprints and introduce the Geometric Dimensioning and Tolerancing (GD&T) system of symbols used to portray mechanical specifications and relationships on mechanical drawings.

Aid Code: 47 - undefined.

Complete Course Listing

421-416 Blueprint Reading-Civil

Credits: .15

This course introduces fundamental elements of civil blueprints including title block components, the alphabet of lines, legends, symbols, and scaling for civil and site pages.

Aid Code: 47 - undefined.

Complete Course Listing

421-417 Geometric Dimensioning & Tolerancing-16

Credits: .4

Mechanical drafting dimensioning fundamentals are developed including conventional tolerancing and basic hole and shaft tolerancing methods.

Aid Code: 47 - undefined.

Complete Course Listing

421-420 Blueprint Reading-Architecture

Credits: 0.1-2.5

Aid Code: 47 - undefined.

Complete Course Listing

421-421 Drafting-Architectural Design

Credits: 0.2-2.5

Aid Code: 47 - undefined.

Complete Course Listing

421-422 Intro To Graphic Communication

Credits: 0.2-2.5

Aid Code: 47 - undefined.

Complete Course Listing

421-423 Silkscreening For Printing

Credits: 0.2-3

Aid Code: 47 - undefined.

Complete Course Listing

421-424 Computer Typesetting & Design

Credits: 0.2-3

Aid Code: 47 - undefined.

Complete Course Listing

421-425 Technical Sketch & Lettering

Credits: 0.2-2.5

Aid Code: 47 - undefined.

Complete Course Listing

421-478 Blueprint Reading**Credits:** 0.1-8**Aid Code:** 47 - undefined.

Complete Course Listing