

MANF220L : Properties of Materials

This course introduces the student to the processes and materials used in modern manufacturing, with an emphasis on steels and nonferrous metallic alloys. After establishing the sources of stock materials and the means to modify them to adjust material properties, the selection of why certain materials is appropriate for different applications is covered. The understanding of manufacturing processes is central to the course, including machine tooling, hot working, cold working, casting, joining processes, and powder metallurgy. In addition, the processes required to manufacture plastics and composites will also be incorporated.

Credits 4

Lab Hours 2

Class Hours 3

Prerequisites

MATH 137L with a grade of C or better and [PHYS125L](#)