

ADM 157: Material Properties

This class identifies the major categories of materials used in manufacturing and compares their general properties to aid in proper selection of material for product functions. Students will perform an analysis of the behavior and characteristics the materials used in manufacturing including polymers, metals, ceramics and composites: their structure, and physical and mechanical properties. Additionally students will perform heat treatment of ferrous and nonferrous metals; and test for hardness, tensile and strength. Technical writing will be introduced. Upon completion of this class students will be able to understand and select proper materials for Additive Manufacturing. (Offered Fall Semester)

Credits: 3

Prerequisites:

ADM 112

Program: Advanced Manufacturing

Experimental Laboratory Credit: 4

Theory Credit: 1