



AL IMAM MOHAMMAD IBN SAUD ISLAMIC UNIVERSITY
COLLEGE OF ENGINEERING
Department of Mechanical Engineering

Course Information	
Course Code and Name:	ME 363 Manufacturing Technology
Credit Hours:	3 (3 Lecture + 1 Tutorial)
Prerequisites:	ME 216 Mechanics of Materials

Course Description
The different manufacturing processes of the engineering materials (metals, plastics, ceramics and composites) including forming processes, deformation and joining processes and improving the materials properties through heat treatment.

Textbook			
Title	Fundamentals of Modern Manufacturing: Materials, Processes, and Systems		
Authors	Mikell P. Groover		
Publisher	John Wiley & Sons, Inc.	Year and Edition	4 th Edition, 2011

Course Contents
Introduction and overview of manufacturing
Fundamentals of metal casting + metal casting processes
Metal casting processes
Shaping processes for polymers
Shaping processes for polymers
Powder metallurgy
Fundamentals of metal forming
Bulk deformation processes in metalworking
Sheet-metal working
Theory of metal cutting + machining operations and machine tools
Machining operations and machine tools + cutting tool technology
Grinding and other abrasive processes
Welding processes
Heat treatment of metals

Academic Coordinator	Signature
Prof. Dr. Sabbah Ataya	<i>S. Ataya</i>



Official Stamp