


Sub.	Course Description – توصيف مقرر دراسي	الموضوع	 <b>كليات المعرفة</b> ALMAAREFA COLLEGES
Date		التاريخ	

Course Code & No	IE342		رقم المقرر ورمزه
Course Name	Introduction to Manufacturing Technology		اسم المقرر
Credit Hours	2 (1+1+2)		عدد الساعات المعتمدة
Pre-requisite	IE 341		المتطلب السابق

<b>General Description</b>	توصيف عام
<p>Introduction to manufacturing concepts. Safety guidelines during manufacturing operations. Introduction to manufacturing material properties. Basic bench work and operations. Introduction to metrology measurements and tolerancing system. Basic manufacturing operations, tool material, and machine tool elements. Functions and planning for machining.</p>	

<b>Course Objectives</b>	أهداف المقرر
<p>To gain detailed knowledge about basic manufacturing concepts, operations, processes, safety guidelines, and metrology.</p> <p><b>By the end of the course, each student should be able To</b></p> <ul style="list-style-type: none"> <li>• Recognize the industrial work place setup environment and basic operations</li> <li>• Recognize the quality measurements in manufacturing environment</li> <li>• Understand basic concept of manufacturing technology operations</li> <li>• Understand functions and planning of manufacturing operations</li> </ul>	

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Course Outlines	مفردات المقرر
<ul style="list-style-type: none"> <li>• Introduction to manufacturing concepts</li> <li>• Work place and Safety guidelines during machining operations</li> <li>• Introduction to properties of materials for manufacturing</li> <li>• Introduction to metrology and measurements</li> <li>• Basic bench work and operations</li> <li>• Heat and consolidative processes</li> <li>• Machining operations basics and machine elements</li> <li>• Functions and planning for manufacturing operations</li> </ul>	

References	المراجع
<p><b>Required Textbooks</b>  Introduction To Basic Manufacturing Process And Workshop Technology, Rajender Singh, Newage Publishers.</p> <p><b>Essential References Materials</b></p> <ul style="list-style-type: none"> <li>• Introduction to Manufacturing Processes, Mikell P. Groover, Wiley and Sons.</li> <li>• Manufacturing Technology: Materials, Processes, and Equipment, Helmi A. Youssef, Hassan A. El-Hofy, Mahmoud H. Ahmed, CRC Press</li> </ul>	