



UNIVERSITI TEKNOLOGI MARA

IDT203: MATERIAL AND MANUFACTURING TECHNOLOGY

<b>Course Name (English)</b>	MATERIAL AND MANUFACTURING TECHNOLOGY <b>APPROVED</b>
<b>Course Code</b>	IDT203
<b>MQF Credit</b>	2
<b>Course Description</b>	<p>This course are emphasizes on understanding in new materials, manufacturing and technology applied that can affect designers in the design process. This course is divided into three parts, which are materials introduction, manufacturing and technology process. First and foremost, student will be introduce on materials that commonly used in manufacturing a product, transport and furniture. In this material sections, it focusing on each material function for each manufacturing process. Meanwhile, in manufacturing section, a series of lectures that introduce types of machines, process of cutting, and process of slicing. Moreover, lecturer will demonstrate the inter-relationship of design, materials, manufacture and test to see how these relate to other non-technical factors. Students will learn the principles of materials technology including the structure and properties of representative materials. Therefore, students will appreciate the main manufacturing processes and their capabilities and limitations. These knowledge will be applied in activities which will demonstrate the principles of inventive but realistic design and the criteria for the selection of materials and processes. The course will be essentially student centered but will be supported by lecture, demonstration, tutorial and video where these are felt to be appropriate. It will involve the student working in a team to tackle problems relating to real manufacturing process.</p>
<b>Transferable Skills</b>	Able to apply design process techniques and material towards manufacturing constraints.
<b>Teaching Methodologies</b>	Lectures, Studio, Demonstrations, Discussion, Workshop
<b>CLO</b>	<p>CLO1 Classify the material, manufacturing and technology involve in product production industry</p> <p>CLO2 Explain the process of material application using suitable material and manufacturing process in industrial production</p> <p>CLO3 Practice the theory of material manufacturing process through teamwork in project related product</p>
<b>Pre-Requisite Courses</b>	No course recommendations