

Department of Mechanical Engineering

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

COURSE OUTLINE TEMPLATE			
Course Title	Basics of Mechanical Engineering		
Course Code	MEIR 11	No. of Credits	02
Department	Civil Engineering	Faculty	Dr.K.Sankaranarayananasamy
Pre-requisites Course Code	-----		
Course Coordinator(s) (if, applicable)	-----		
Other Course Teacher(s)/Tutor(s), E-mail	ksnsamy@nitt.edu	Telephone No.	9486001114
Course Type	<input checked="" type="checkbox"/> Core course <input type="checkbox"/> Elective course		
<u>COURSE OVERVIEW</u>			
<p>This integrated course involves the basic understanding of fundamental for mechanical engineering concept of Thermal engineering, Engineering materials and Manufacturing of basic engineering components. The course familiarises the students with analysis the problems by applying the fundamentals of mechanical engineering and proceed for the development of the mechanical systems.</p>			
<u>COURSE OBJECTIVE</u>			
<ol style="list-style-type: none"> 1. To explain the importance of concepts of mechanical engineering and conservation equations. 2. To introduce the techniques for analyzing the forces, momentum and power. 3. To introduce the various properties of materials, and the techniques of selection of materials. 4. To identify the basic elements of mechanical system and write their constitutive equations and performance analysis techniques. 			
<u>COURSE OUTCOMES (CO)</u>			
Upon the completion of the course, the students will be able to			Aligned Programme Outcomes (PO)
1. Aware of thermodynamics laws and its applications in IC engines and air compressors			1,3,4