

Semester:	5				
Course Code:	ME3020				
Course Name:	Mechanical Engineering Laboratory I				
Credits Value:	1 (Notional hours: 50)				
Pre-requisites:	ME 2020 and ME2040 and CE2080				
Core/ Optional:	Core				
Hourly Breakdown	Lectures (hours)	Tutorials (hours)	Practical classes (hours)	Assignments (hours)	Independent Learning & Assessment (hours)
			26	04	20
<p>Course Aim: To provide the opportunity to engage in self-directed learning to solve as a team an open-ended problem in the areas of mechanics of machines, thermodynamics, and mechanics of materials so that the students will be able to formulate an experiment to scientifically analyze and discuss the outcomes.</p> <p>Intended Learning Outcomes: On successful completion of the course, the students should be able to:</p> <ul style="list-style-type: none"> ➤ hypothesize and test viable solutions ➤ work as a team to resolve conflicting requirements ➤ acquire new knowledge on their own to determine a viable solution ➤ communicate professionally through viva voce or reports 					
<p>Course Content:</p> <ul style="list-style-type: none"> ➤ Mechanics of Machines (specific lab/labs to be decided and announced at the beginning of the class) ➤ Thermodynamics cycles (specific lab/labs to be decided and announced at the beginning of the class) ➤ Mechanics of Material (specific lab/labs to be decided and announced at the beginning of the class) 					
<p>Teaching/ Learning Methods: Laboratory experiments, self-learning activities, In-class exercises and assignments</p>					
Assessment Strategy:					
Continuous Assessment 70%			Final Assessment 30%		

Details:		Theory (%)	Practical (%)	Other (%) (Viva)
Assignments/Quizzes/Practicals/Reports	40%			30%
Verbal Presentations	30%			

Recommended Reading:

- Will be provided at the beginning of the class depending on the lab/labs chosen for the given semester.

Note: Each offering the choice of the specific lab/labs will be different from the previous offering and will be decided prior to the commencement of the course and announced at the beginning of the course.