UNIVERSITI TEKNOLOGI MARA

MEC101: INTRODUCTION TO ENGINEERING

Course Name (English)	INTRODUCTION TO ENGINEERING APPROVED
Course Code	MEC101
MQF Credit	3
Course Description	This course covers the engineering profession in general and mechanical engineering in particular. Students will be introduced to the various disciplines in engineering and particularly mechanical engineering, basic problem solving methods, laboratory report writing and the use of computers in engineering solutions, engineering estimations and approximations, dimensions, units and unit conversions, and representation of technical information. Group work introduces students to working in a team to collectively undertake and complete the assigned tasks. The computational tools useful for solving engineering problems are covered in the practical sessions.
Transferable Skills	Demonstrate ability to apply creative, imaginative and innovative thinking and ideas to problem solving.
Teaching Methodologies	Lectures, Discussion, Presentation, Small Group Sessions , Computer Aided Learning
CLO	CLO1 Apply a systematic and logical approach in solving an engineering problem and presenting its solution. [PLO1,LO1] CLO2 Show ability to use computer software packages such as word processor, spreadsheet, and presentation software in introductory engineering problem solving. [PLO5,LO2] CLO3 Perform collective work with considerations of ethics and responsibilities. [PLO8,LO6] CLO4 Show ability to collectively undertake and complete assigned project in a small group of 3-5 members. [PLO9,LO9] CLO5 Demonstrate effective communication on well-defined engineering activities with the engineers and society at large. [PLO10,LO4]
Pre-Requisite Courses	No course recommendations
Reading List	**Recommended Text**: • **Eide, Arvid R., Roland D. Jenison, Larry L. Northup, and Steven K. Mikelson 2012, *Engineering Fundamentals and Problem Solving*, 6th Ed., McGraw-Hill** **Reference Book Resources**: • **Holtzapple, Mark T. and W. D. Reece 2003, *Foundations of Engineering*, McGraw-Hill**
Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources