

Module code	TG-1305		
Module Title	Introduction to Computer Aided Engineering		
Degree/Diploma	Bachelor of Engineering Degree		
Type of Module	Major Option		
Modular Credits	2	Total student workload	5 hours/week
		Contact hours	3 hours/week
Prerequisite	None		
Anti-requisite	None		
Aims			
<p>This module aims to provide students with a working knowledge of basic engineering drawing and the software tools that can be used to produce various drawings. Computer Aided Design (CAD) packages will be taught to the students for a better understanding and an appreciation to the importance of CAD in the modern engineering design environment. This module also creates opportunities for the students in gaining skills using a modern 3D CAD package. These skills will be essential for the design modules later in their degree as well as in their engineering careers.</p>			
Learning Outcomes:			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	10%	- read and interpret basic engineering drawings created using CAE software packages	
Middle order :	10%	- create new engineering drawing models using CAE for specific tasks	
Higher order:	80%	- assemble the created models and apply them in to engineering problems - modify the parts of the model appropriately if required	
Module Contents			
<ul style="list-style-type: none"> - introduction to Computer Aided Engineering (CAE) packages - Engineering graphics principles including orthographic and isometric projections - General arrangement, layout, dimensioning and tolerance of parts - Sketching, building 3D parts, assembling part models, and modifying parts - Assembling models in a CAE package 			
Assessment	Formative assessment	Quizzes and MCQs	
	Summative assessment	Examination: 0%	
		Coursework: 100% <ul style="list-style-type: none"> - 7 assignments (10% each) - 2 class tests (5% each) - 1 project report (20%) 	