Module code		TG-1211				
Module Title		Engineering Design 1				
Degree/Diploma B		Bachelor of Engineering Degree				
Type of Module		Major Core				
Modular Cred	dits	2	Total student	5	hours/week	
			workload			
			Contact hours	3	hours/week	
Prerequisite		None				
Anti-requisite	9	None				
Aims						
This module introduces students to the process of design and seeks to engage their enthusiasm for						
engineering from the beginning of the program. The engineering method is used in the design and						
manufacture of a product. Product dissection is exploited to evaluate how others have solved						
design problems. Development is started on competencies in professional practice topics,						
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- Introduction to Engineering as a career, available development paths/opportunities

- Introduction to Total Design and the Engineering design process, emphasizing a systems approach - Identifying stakeholders and their requirements

- Generating and evaluating design concepts, brainstorming, creativity

- Understanding design drawings, including assembly, subassembly and cross section views

- Reverse engineering and design improvement via product disassembly

- Multidisciplinary design including aspects of electrical, computer and mechanical engineering via a project based learning experience (robot project)

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Assessment	Formative assessment	Quizzes and MCQs		
	Summative assessment	Examination: 0%		
		Coursework: 100%		
		- 6 reports (10% each)		
		- 1 final project report (20%)		
		- 1 final presentation (20%)		