

Module code	TE-4304		
Module Title	Energy Efficiency and Policy		
Degree/Diploma	Bachelor of Engineering (Energy Systems)		
Type of Module	Major Option		
Modular Credits	4	Total student Workload	8 hours/week
		Contact hours	4 hours/week
Prerequisite	None		
Anti-requisite	None		
Aims			
<p>The module aims to expose students to energy efficiency and policy in order to use energy efficiently and reduce negative environmental impact. The concept of energy efficiency and policy and the methods used for energy efficiently in primary sectors will also be discussed. The module explains how to analyse energy efficiency and policy with regards to implementation of modern technology. This enables the students to integrate the understanding into an appreciation of advanced technology that must be employed to maintain a liveable environment while improving economic circumstances for the population or country.</p>			
Learning Outcomes			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order:	10%	<ul style="list-style-type: none"> - describe the different types of energy efficiency and policy program and emissions in the country - comprehend energy efficiency standard and energy policy that is suitable to be implemented in the country 	
Middle order:	10%	<ul style="list-style-type: none"> - apply the basic concept of energy and calculate potential energy savings and potential emission reduction from the program - analyse the environmental impact before and after energy efficiency program is implemented 	
Higher order:	80%	<ul style="list-style-type: none"> - justify the need of implementation of energy efficiency program in the buildings and/or country - evaluate complex problems related to energy efficiency and policy - recommend potential policy program and calculate its potential benefit to the society and the environment - work cooperatively in groups when reviewing case studies 	
Module Contents			
<ul style="list-style-type: none"> - Emission production, reduction and emission taxation - Energy efficiency-lighting retrofits - Energy efficiency standards and labels - Energy and environmental impact of energy efficiency program - Economic impact and analysis of energy efficiency program - Energy labelling and market transformation of energy efficiency and policy program 			
Assessment	Formative assessment	Monthly online multiple choice questions will be used to test and to give feedback for their learning	
	Summative assessment	Examination: 0% Coursework: 100% <ul style="list-style-type: none"> - 4 assignments (15% each) - 1 individual report (30%) - 1 oral presentation (10%) 	