

Module code	SM-4336		
Module Title	Operations Research II		
Degree/Diploma	Bachelor of Science (Mathematics)		
Type of Module	Major Option		
Modular Credits	4	Total student Workload	10 hours/week
		Contact hours	4 hours/week
Prerequisite	SM-2203 Linear Algebra and its Applications and SM-2205 Intermediate Statistics		
Anti-requisite	None		
Aims			
The module is designed for students to learn different optimization techniques that are applied to solve problems on manufacturing service, multi-factor decision making and other systems.			
Learning Outcomes			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	40%	- understand the characteristics of different types of decision-making environments	
Middle order :	40%	- use and apply appropriate decision making approaches	
Higher order:	20%	- interpret the results of the solution	
Module Contents			
<ul style="list-style-type: none"> - Decision tree and utility function. - Network Models. - Inventory Control model. - Forecasting Models. - Markov Analysis. - Queuing Theory. - Simulation. 			
Assessment	Formative assessment	Tutorial and feedback.	
	Summative assessment	Examination: 60% Coursework: 40% - 2 class tests (40%)	