

Module code	TF-4203		
Module Title	Research Project (Engineering Design VII & Engineering Design VIII for Information Communication Systems)		
Degree/Diploma	Bachelor of Engineering (Systems Engineering) for Information Communication Systems		
Type of Module	Major Core		
Modular Credits	8	Total student Workload	16 hours/week
		Contact hours	8 hours/week
Prerequisite	None		
Anti-requisite	TF-4201 Engineering Design VII (Information Communication Systems); TF-4202 Engineering Design VIII (Information Communication Systems)		
Aims			
To implement and integrate the concepts and theories of research methodologies as well as the acquired practical skills when performing an independent research project. It also aims to teach students about research attitude, research ethics and data analyses and interpretation where applicable.			
Learning Outcomes			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	10%	- describe research methodologies and research ethics	
Middle order :	10%	- review research subject areas pertaining to the respective topic of study - design research proposal and experiments - analyse and collect experimental data	
Higher order:	80%	- use equipment and follow instructions according to standard procedures - interpret and critically appraise study design, research procedure and findings - manage project tasks and timeline in order to successfully accomplish given project - frequent verbal and written communication with supervisor - present experimental data and observations orally - write a research project report in journal article format	
Module Contents			
<ul style="list-style-type: none"> - Identify research problem and research topic in related engineering subjects - Investigate and explore the application of the concepts of related subjects - Research methodology, laboratory skills and scientific reporting skills - Research proposal writing - Field work for data collection - Conduct of research including physical measurements, data analysis & interpretation and time management - Report writing in the form of academic journal article 			
Assessment	Formative assessment	Weekly discussions about progress of project with supervisor(s)	
	Summative assessment	Examination: 0% Coursework: 100% - 1 research proposal (20%)* - 1 research project report in journal article format (40%)* - 2 oral presentations of project report (15% each)* - Assessment of student's initiative (10%)** Notes: *by two assessors (other than supervisor); **by supervisor	