

SUMMARY OF INFORMATION ON EACH COURSE

1.	Name of Course	Systems Analysis and Design
2.	Course Code	TSA 2131
3.	Status of Course [Applies to (cohort)]	Common Core for B.IT (Hons) Data Communications and Networking B.IT (Hons) Information Technology Management B.IT (Hons) Artificial Intelligence B.IT (Hons) Security Technology B.Sc (Hons) Bioinformatics
4.	MQF Level/Stage Note : <i>Certificate – MQF Level 3</i> <i>Diploma – MQF Level 4</i> <i>Bachelor – MQF Level 6</i> <i>Masters – MQF Level 7</i> <i>Doctoral – MQF Level 8</i>	Bachelor – MQF Level 6
5.	Version (State the date of the Senate approval – history of previous and current approval date)	Date of Previous Version: June 2012 Date of Current Version: June 2014
6.	Pre-Requisite	TDB1131 Database Systems
7.	Name(s) of academic/teaching staff	Ong Thian Song Pang Ying Han
8.	Semester and Year offered	Trimester 1, Year 2
9.	Objective of the course in the programme :	To provide students with concepts and skills needed to analyze and design information systems covering

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	major steps of a complete system development life cycle.									
10.	<p>Justification for including the course in the programme :</p> <p>This subject focuses on various processes involved in developing new and existing information systems. All these processes require a unique set of skills and knowledge of both the technical and business domains. Relevant to the program, this subject provides students with an understanding of various approaches for information systems development; and in-depth knowledge and experience with the requirements analysis, modelling aspects and system design.</p>									
11.	Course Learning Outcomes :			Domain				Level		
	LO1: Define the processes/ phases that carry out in system analysis and design (SAD).			Cognitive				1		
	LO2: Explain the structured work and processes in planning, analysis, design and implementation.			Cognitive				6		
	LO3: Apply the techniques and methods used in system development environment.			Cognitive				3		
	LO4: Create documentation for software project that used the SAD practices.			Cognitive				5		
12.	Mapping of Learning Outcomes to Programme Outcomes :									
	Learning Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
	LO1	X	X	X						
	LO2	X	X	X						
	LO3			X		X				
LO4	X		X		X					
13.	Assessment Methods and Types :									
	Method and Type		Description/Details					Percentage		
	Final Exam		Written Exam					60%		
	Test		Written Exam					20%		

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	Quiz	Written Exam			5%
	Project	Report			15%
14.	Mapping of assessment components to learning outcomes (LOs)				
	Assessment Components	LO1	LO2	LO3	LO4
	Final Exam	70.59	70.59	70.59	
	Test	17.65	17.65	17.65	
	Quiz	11.76	11.76	11.76	
	Project				100
15.	Details of Course				
	Topics	Mode of Delivery (eg : Lecture, Tutorial, Workshop, Seminar, etc.) Indicate allocation of SLT (lecture, tutorial, lab) for each subtopic			
		Lecture	Tutorial		
	1. Foundation for Systems Development The system development environment. The origins of software, managing the information systems project, determining feasibility and managing analysis and design activities	4	2		
	2. Information Requirements and Planning Information gathering, identifying and selecting systems development projects, initiating and planning systems development projects, assessing project feasibility, determining project benefits and costs	6	3		
	3. Analysis Process Determining system requirements, structuring system process requirements, using data flow diagrams, structuring system logic requirements, structuring system data requirement, conceptual data modeling and E-R model, business rules	8	4		
	4. Design Phase Designing databases, designing forms	6	3		

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	and reports, designing interfaces and dialogues, finalizing design specifications, designing distributed and internet systems		
	5. Implementation and Maintenance System implementation, software application testing, documenting the system, maintaining information systems, conducting systems maintenance	4	2
	Total	28	14
	Total Student Learning Time (SLT)	Face to Face / Guided Learning	Independent Learning
	Lecture	28	28
	Tutorials	14	14
	Laboratory/Practical	0	0
	Presentation	0	0
	Assignment	0	10
	Mid Term Test	1	5
	Final Exam	2	16
	Quiz	2 times	2
	Sub Total	45	75
	Total SLT	120	
16.	Credit Value	120/40 = 3	
17.	Reading Materials :		
	Textbooks		
	J.A Hoffer, J.F. George, & J.S. Valacich, (2014). Modern Systems Analysis and Design, 7th Ed, ISBN-13: 978-0132991308, Prentice Hall.		
	Reference Material (including 'Statutes' for Law)		
	1. Kendall & Kendall, (2010). System Analysis and Design, 7 th Ed. Prentice Hall.		

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2. Whitten & Bentley, (2007). System Analysis and Design Methods, 7th Ed. Irwin Publishing

Appendix (to be compiled when submitting the complete syllabus for the programme) :

1. Mission and Vision of the University and Faculty
2. Programme Objectives or Programme Educational Objectives
3. Programme Outcomes (POs)
4. Mapping of POs to the 8 MQF domain
5. Summary of the Bloom's Taxonomy's Domain Coverage in all the Los in the format below :

Subject	Learning Outcomes (please state the learning Outcomes)	Bloom's Taxonomy Domain		
		Affective	Cognitive	Psychomotor
ABC1234	Learning Outcome 1			
	Learning Outcome 2			
	Learning Outcome 3			
	Learning Outcome 4			
DEF5678	Learning Outcome 1			
	Learning Outcome 2			
	Learning Outcome 3			
	Learning Outcome 4			

6. Summary of LO to PO measurement
7. Measurement and Tabulation of result for LO achievement
8. Measurement Tabulation of result for PO achievement