

COURSE INFORMATION

1.	Name of Course		Decision Support Systems												
2.	Course Code		TIC3251												
3.	Type of Course		Specialization Core												
4.	Synopsis		The course covers the decision support paradigm, the nature of decision making, decisions in organisations and relationships to other fields of study.												
5.	Version (State the date of the Senate's approval - previous and the current approval date)		Current: January 2018 Previous: June 2016												
6.	Name(s) of Academic Staff		Chua Fang Fang												
7.	Semester and Year Offered		Trimester 2 (Gamma)												
8.	Credit Value		4 credit hours												
9.	Pre-Requisite		NIL												
10.	Objective of the course in the programme: To understand the concepts, methodologies and technologies of Decision Support Systems and application to real world problems.														
11.	Justification for including the course in the programme: This course covers the decision support systems (DSS) and Business Intelligence (BI) concepts, types, applications and tools, and intelligent systems.														
12.	Course Learning Outcomes (CLO)		Domain	Level											
	CLO1: Define the components of Decision Support Systems (DSS).		Cognitive	1											
	CLO2: Explain the decision making phases.		Cognitive	2											
	CLO3: Identify the decision support technologies in modern organizations.		Cognitive	4											
	CLO4: Explain various types of DSS tools and intelligent systems.		Cognitive	2											
13.	Mapping of the Course Learning Outcomes to the Programme Learning Outcomes, Teaching Methods and Assessment:														
	Course Learning Outcomes (CLO) (Must tally with CLOs in item 12)	Programme Learning Outcomes (PLO)												Teaching Methods	Assessment Method
		P	P	P	P	P	P	P	P	P	P	P	P		
		L	L	L	L	L	L	L	L	L	L	L	L		
		O	O	O	O	O	O	O	O	O	O	O	O		
		1	2	3	4	5	6	7	8	9	0	1	2		
	CLO1													Lecture/Practical/Tutorial	Test/Final Exam/Assignments
	CLO2													Lecture/Practical/Tutorial	Test/Final Exam/Assignments/Tutorials
	CLO3													Lecture/Practical/Tutorial	Test/Final Exam/Assignments/Tutorials
	CLO4													Lecture/Practical/Tutorial	Final Exam/Assignments
	Total													Indicate the relevancy between the CLO and PLO by ticking "✓" the appropriate relevant box (This description must be read together with standards 2.1.2, 2.2.1, and 2.2.2 in Area 2 – pages 16 & 18 of COPPA 2.0)	
14.	Transferable Skills: Critical thinking-Through brainstorming on given case study and report writing-tutorials and presentations Communication and Research-Through discussion and teamwork on assignments - assignments														
15.	Distribution of Student Learning Time (SLT)														
	Course Content Outline	**CLO	Teaching and Learning Activities				Guided Learning (NF2F)*	Independent Learning (NF2F)*	Total SLT						
			Guided Learning (F2F)*												
			*L	*T	*P	*O									
1	Decision Support Systems (DSS) Overview Traditional versus modern decision making, DSS concepts, Decision making phases (Intelligence, Design, Choice and Implementation), DSS components, DSS hardware and DSS classification	1,2	4	2				6	12						
2	Decision Making Analysis Decision Analysis using modelling techniques, decision tables, decision trees, mathematical models, multiple goals, sensitivity analysis, what- if analysis, goal seeking, heuristic programming, simulation, and visual interactive modelling.	1,2	6	4	4			14	28						
3	Decision Support System Technologies Data warehouse, data marts, business analytics, online analytical processing, data mining, data visualization and geographic information systems	3	6	4	4			14	28						
4	Decision Support System Development Traditional system development life cycle, Development methodologies (prototyping and RAD), DSS technology levels and tools	3	2	4	2		4	8	20						
5	Collaborative and Enterprise DSS Group decision making, communication and collaboration, Group support systems (GSS), GSS meeting process, distance learning and creativity, enterprise information systems (EIS), integration of EIS and DSS, Supply Chain Management (SCM), Customer Relationship Management (CRM) and knowledge management	4	2	2			4	4	12						
6	Intelligent DSS Artificial intelligence, expert systems and intelligent system over the internet	4	4	2				6	12						
	Total SLT								112						

SUMMATIVE ASSESSMENT			
1. Continuous Assessment		Percentage %	Total SLT
Test		15%	5
Assignments		25%	17
Tutorials		10%	6
Total SLT for Continuous Assessment			28
2. Final Assessment		Percentage %	Total SLT
Final Exam		50%	F2F 2 ILT 18
Total SLT for Final Assessment (F2F + NF2F)			20
Grand Total		100%	160
**Indicate the CLO based on the CLO's numbering in Item 12. *L= Lecture, *T= Tutorial, *P= Practical, *O= Others, F2F*= Face to Face, NF2F*= Non Face to Face			
16 .	Identify Special Requirement to Deliver the Course (e.g., software, nursery, computer lab, simulation room): Computer Lab		
17 .	Main References: R.Sharda, D.Delen, E. Turban "Business Intelligence and Analytics: Systems for Decision Support", 10th Edition, Pearson Prentice Hall, 2015.		
18 .	Additional References:		

Note:

Cells shaded light grey contain formulas / fixed values. Edit these formulas only if needed.