

1.	Name of Course				System Analysis & Design	
2.	Course Code				CCPS2563	
3.	Name(s) of academic staff					
4.	Rationale for the inclusion of the course/module in the programme				Faculty In large information technology environments the complexity of the systems that are to be developed and/or maintained is equally large. An ad hoc approach to systems development in such an environment is likely to lead to inappropriate products. Formal systems analysis and design methodologies are the accepted solution to this problem. Any IT graduate undertaking IT employment must be aware of, and possess skills in, systems analysis and design in order to usefully contribute to systems development and maintenance. This module provides an opportunity to consider and evaluate the strategies available for analysis and design, The course will prepare the students to solve system development problems in organizations.	
5.	Semester and Year offered				2/2	
6.	Total Student Learning Time (SLT)		Face to Face			Total Guided and Independent Learning
	L = Lecture T = Tutorial P = Practical O= Others		L	T	P	O
			28	14		
7.	Credit Value				3	
8.	Prerequisite (if any)				CCP0101 Database Management System	
9.	Objectives: - To equip students with an awareness of and understanding of systems analysis and design, covering major steps of a complete system development life cycle. - To enable students to select and apply a variety of systems analysis techniques and be aware of the different information they convey. - To develop thought processes for the purpose of investigating and developing large information systems.					
10.	Learning outcomes: By the end of the subject, students should be able to: - distinguish between various systems analysis and design methodologies; - Choose the correct methodology to develop different types of systems. - apply systems analysis techniques to gain knowledge of an information system’s requirements, and create a corresponding design; - Distinguish and differentiate the stages of System Development Life Cycle. - Plan, analyse, design and develop a new system from scratch. - Handle the software development tools like CASE and RAD					
11.	Transferable Skills: - Be proficient in developing different types of systems - Use personal initiative and communication skills throughout the process.					

12.	Teaching-learning and assessment strategy A variety of teaching and learning strategies are used throughout the course, including: - Classroom lessons: Lectures and Power Point presentations - Laboratory sessions: Practice exercises - brainstorming; - student-Lecturer discussion - collaborative and co-operative learning; - Independent study. Assessment strategies include the following: - Ongoing quizzes - Midterm tests - Performance Assessment (project, Assigned exercises) - Lecturer Observation												
13.	Synopsis: This course develops a systematic understanding on the concepts and practicalities of systems development process, The latest analysis requirements and design specification methods are given detailed coverage. The course will prepare the students to solve information system development problems in organizations.												
14.	Mode of Delivery: - Classroom lessons: Lectures and Power Point presentations - Laboratory sessions: Practice exercises												
15.	Assessment Methods and Types: The assessment for this course will be based on the following: Coursework 50% - Quizzes 10% - Project and assignments 20% - Mid-Semester Exam 20% Final Examination <u>50%</u> 100%												
16.	Mapping of the course/module to the Programme Aims												
	A1	A2	A3	A4	A5	A6	A7	A8	A9				
	2	0	2	1	1	1	2	1	0				
17.	Mapping of the course/module to the Programme Learning Outcomes												
	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9	LO10	LO11	LO12	
	1	0	1	1	3	0	1	3	3	1	0	0	
18.	Content outline of the course/module and the SLT per topic												
		Details								SLT			
										L	T	Indep.	Total
	Topic 1	Course Introduction - Introduction to System Analysis - The system development environment - Systems Development Life Cycle - Strategy and planning, systems analysis, logical design, physical design - Implementation and maintenance.								4	2	12	18

19.	Topic 2	System Development Techniques and Methodologies • Process modelling, function • decomposition diagramming, • Entity-Relationship diagramming, • data flow diagramming • Procedure modelling.	12	6	36	54
	Topic 3	Design and layout of: • Forms, • screens, • dialogues, • report	4	2	12	18
	Topic 4	Integrated Computer-Aided Software Engineering (CASE) tool • A standard development environment to support the entire system development life cycle. • It is recommended that Oracle Designer/2000 be used for this purpose	4	2	12	18
	Topic 5	Rapid Application Development (RAD) tool • To enhance and visualize the delivered concepts and techniques. • It is recommended that RAD tools such as Power Builder, Power Objects, Visual Basic, IntraBuilder, or C++ Builder be used for this purpose.	4	2	12	18
		Total	28	14	84	126
20.	Main references supporting the course: Jeffrey A. Hoffer, Joey F George, and Joseph S Valacich, Modern Systems Analysis and Design (5th Edition) (2007)					
	Additional references supporting the course: 1. Dennis, A., Wixom, B.H., & Roth, R.M. (2006). Systems Analysis & Design (3rd ed.). USA: John Wiley & Sons, Inc. 2. Dennis, A., Wixom, B.H., & Tegarden, D. (2005). Systems Analysis & Design with UML Version 2.0 (2nd ed.). USA: John Wiley & Sons, Inc. 3. Kendall, K.E., & Kendall, J.E. (2005). Systems Analysis and Design (6th ed.). Upper-Saddle River, NJ: Prentice-Hall.					
21.	Other additional information All materials will be available to the students online.					