

1.	Name of Course		E-Commerce system			
2.	Course Code		CCPS4563			
3.	Name(s) of academic staff					
4.	Rationale for the inclusion of the course/module in the programme		<u>major</u> E-commerce is among the most important technological and market trends of the 21st century. Many new e-commerce applications are significantly benefit from emerging data communication and mobile networks. Advances in e-commerce have resulted in significant progress towards strategies, requirements, and development of e-commerce applications. This module is devoted to introduce students to e-commerce and train them to strategize and create E-commerce and mobile commerce applications. It focuses upon the development of software application using fourth generation languages, address networking requirements, discuss support from wireless carriers, and present some open research problems.			
5.	Semester and Year offered		1/4			
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	Independent study=84 hours
		28	14	0	0	Total =126
7.	Credit Value		3			
8.	Prerequisite (if any)		none			
9.	Objectives: This subject is designed to introduce the students to: - the main concepts related to E-Commerce and Mobile Commerce - the e-commerce technology and infrastructure; - the major EC software packages and EC application suites - the major steps in developing e-commerce and Mobile Commerce applications - methods for connecting E-Commerce and Mobile Commerce to back-end systems and databases					
10.	Learning outcomes: Upon completion of this subject, students should be able to: - Describe the main concepts related to E-Commerce and Mobile Commerce. - Describe the major EC applications and their major functionalities - Discuss the major EC software packages , infrastructure and application suites - address the networking requirements for supporting E-Commerce and Mobile Commerce - Describe the major steps in developing e-commerce and Mobile Commerce applications. - Describe various methods for connecting E-Commerce and Mobile Commerce to back-end systems and databases - Discuss the security issues involved in conducting business transactions on the internet. - Develop a prototype of an e-commerce and Mobile Commerce application					
11.	Transferable Skills: - explain the process of introducing e-commerce applications into an organization; - Discuss the practical implementation of a e-commerce application and help the organization to develop a high quality system consistent with organizational business goals. - Develop appropriate security policies and guidelines for e-commerce systems. - Communicate effectively about database systems, with specialists and non-specialists.					

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 - Tutorial sessions - brainstorming - Lecturer-led problem-solving sessions - collaborative and co-operative learning; - Independent study. Assessment strategies include the following: - Performance Assessment (Project, Assigned exercises) - Lecturer Observation - Quizzes, tests, and examinations																																			
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14.	Mode of Delivery: - Classroom lessons. Lectures and Presentations - Tutorial sessions																																			
15.	Assessment Methods and Types: The assessment for this course will be based on the following: <table><tr><td></td><td>Coursework</td><td>50%</td></tr><tr><td>• Midterm test</td><td>20%</td><td></td></tr><tr><td>• Project</td><td>20%</td><td></td></tr><tr><td>• quizzes and Assignments</td><td>10%</td><td></td></tr><tr><td></td><td>Final Examination</td><td><u>50%</u></td></tr><tr><td></td><td></td><td>100%</td></tr></table>													Coursework	50%	• Midterm test	20%		• Project	20%		• quizzes and Assignments	10%			Final Examination	<u>50%</u>			100%						
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18.	Content outline of the course/module and the SLT per topic <table><tr><th rowspan="2"></th><th rowspan="2">Details</th><th colspan="4">SLT</th></tr><tr><th>L</th><th>T</th><th>Indep.</th><th>Total</th></tr><tr><td>Topic 1</td><td> Course Introduction. Introduction to e-commerce - E-commerce and its various categories - The ‘automate’ imperative – the ‘informate’ imperative – - the emergence of new ‘socio-economic’ systems (e.g. ecommerce as a new form of catalogue shopping) - The economic impact of EC to organizations, consumers, and society. - limitations of EC - Early Developments in e-commerce - major types of EC transactions - Competition in the digital economy. </td><td>2</td><td>1</td><td>6</td><td>9</td></tr></table>													Details	SLT				L	T	Indep.	Total	Topic 1	Course Introduction. Introduction to e-commerce - E-commerce and its various categories - The ‘automate’ imperative – the ‘informate’ imperative – - the emergence of new ‘socio-economic’ systems (e.g. ecommerce as a new form of catalogue shopping) - The economic impact of EC to organizations, consumers, and society. - limitations of EC - Early Developments in e-commerce - major types of EC transactions - Competition in the digital economy.	2	1	6	9								
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	Topic 2	- E-commerce in various business settings 'Pure Systems Vs Hybrid Systems' – Kiosks – e-commerce in Banking/Finance, Manufacturing, and Retailing - EC business models - Business-to-Consumer (B2C) e-Commerce - Business-to-Business (B2B) e-Commerce - Consumer-to-Consumer (C2C) e-Commerce: - The supply-chain - E-Supply Chains, Collaborative Commerce, Intrabusiness EC, and Corporate Portals	2	1	6	9
	Topic 3	E-commerce processes: - The nine essential e-commerce processes - Access control and security - Profiling and personalizing - Search management - Content management - Catalog management - Payment - Workflow management - Event notification - Collaboration and trading E-Marketplaces: - Structures, Mechanisms, Economics and Impacts	2	1	6	9
	Topic 4	E-commerce and M-commerce Technologies - Technologies that are necessary for electronic commerce include: - Information technologies - Telecommunications technologies - Internet technologies - E-commerce and M-commerce toolkits - Major software packages and application suites. - Microsoft - Adobe - Open Source	4	2	12	18
	Topic 5	Building E-Commerce Applications and Infrastructure - e-commerce infrastructure and networking requirements - Major EC application development options and their benefits and limitations. - Various EC application outsourcing options including the use of an application service provider (ASP), Wireless application service provider (WASP) and utility computing. - Service-oriented architecture (SOA) and its relationship to EC. - Planning and designing an e-commerce application - Building an e-commerce web site - Network reengineering to support e-commerce application - Methods for connecting an e-commerce application to back-end systems and databases. - Integrating Security and payment methods - System performance analysis - System Maintenance and management - e-commerce systems merging - Introduction to WebSphere Commerce. (by IBM)	6	3	18	27

	Topic 6	Mobile Commerce and Pervasive Computing - mobile commerce applications - Mobile Commerce opportunities and challenges - Designing and development considerations of M-Commerce - Architecture and Protocols - Mobile Commerce: Framework and Networking Support - the mobile computing environment - major types of wireless telecommunications networks and wireless carriers supporting Mobile Commerce - mobile transaction network - configuring Mobile Commerce portals - The key characteristics and current uses of pervasive computing.	4	2	12	18
	Topic 7	E-Commerce and M-Commerce Security - the basic elements of EC security - the trends in computer and network security attacks - the common security practices of businesses of all sizes - common mistakes that organizations make in managing security - The major technologies for securing EC communications. - the major technologies for securing EC networks components - agent based secure E-payment - The types of fraud on the Internet and how to protect against them. - Secure Socket Layer (SSL) - Digital Wallet - Secure Electronic Transaction (SET)	4	2	12	18
	Topic 8	Electronic Payment Systems - Electronic payments processes - Technology Requirements for Processing Credit Cards online. - various online alternatives to credit card payments - smart cards - The processes and parties involved in e-checking.	2	1	6	9
	Topic 9	Selected Topics in E-Commerce and M-Commerce - Introduction to WebSphere Commerce. - Case studies: On-line Commerce systems (successes and failures) - Present some open research problems	2	1	6	9
		Total SLT	28	14	84	126
19.	Main references supporting the course: - Kenneth Laudon and Carol Guercio Traver, Electronic Commerce: A Managerial Perspective 2010 (6th Edition) (Prentice Hall), 2009 - Dave Chaffey, E-Business and E-Commerce Management: Strategy, Implementation and Practice (4th Edition) (Prentice Hall), 2010 Additional references supporting the course: - Norman Sadeh, M-Commerce Technologies, Services, and Business Models, (John Wiley & Sons, Inc), 2002 - Janice Reynolds, The Complete E-Commerce Book: Design, Build & Maintain a Successful Web-based Business, (CMP Books), 2004 - Lynie Arden, Start Your Own E-Business, (2nd Ed.) (Entrepreneur Press), 2009 - Peter Swithinbank, Charles Ackeifi, Jennifer Allan, planning and Managing the Deployment of WebSphere Commerce (1st ed.), (IBM redbooks), 2008.					
20.	Other additional information All materials will be available to the students online.					