

Subject Description Form

Subject Code	COMP 5122
Subject Title	E-Commerce Fundamentals and Development
Credit Value	3
Level	5
Pre-requisite/Exclusion	Nil
Objectives	<p>The objectives of this subject are to:</p> <ol style="list-style-type: none"> 1. introduce the infrastructure and functional components for e-commerce; 2. enable students to understand the enabling technologies for e-commerce; 3. study various e-commerce applications.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a) acquire a thorough understanding of e-commerce and its applications; b) understand the enabling technologies for e-commerce; c) be able to generate critical review and consolidation of e-commerce; and d) demonstrate leadership and qualities of reflective practitioners.
Subject Synopsis/ Indicative Syllabus	<ul style="list-style-type: none"> • Web system and programming: Web system overview. HyperText Transfer Protocol (HTTP). Load balancing. Caching. HyperText Mark up Language (HTML). Client-side programming. Server-side programming. • Cryptography: Security requirements. Asymmetric key encryption. Symmetric key encryption. Message digest. Digital signature. Digital certificate. Public key infrastructure. • Internet security: IPSec. Firewall. Secure Socket Layer (SSL) Protocol/Transport Layer Security. Application layer security. • Internet payment systems: Secure electronic transaction (SET). Electronic cash. Electronic check. Micropayment methods. Smart card. • E-commerce applications: Business models. Consumer-oriented e-commerce. Business-oriented e-commerce. Auction. Case studies and examples. • Advanced/current topics: e.g., Mobile agent-based e-commerce, m-commerce.
Teaching/Learning Methodology	39 hours of class activities including lectures, tutorials, lab(s), workshop(s) and seminar(s) where applicable.

Assessment Methods in Alignment with Intended Learning Outcomes	Specific Assessment Methods/Tasks	% weighting	Intended subject learning outcomes to be assessed			
			a	b	c	d
	Assignments, Tests & Projects	55	✓	✓	✓	✓
	Final Examination	45	✓	✓	✓	
	Total	100				
Student study effort expected	Class Contact:					
	Class activities (lectures, tutorials, lab(s))				39 hours	
	Other student study effort:					
	Self-study, assignments, project, exam				66 hours	
	Total student study effort				105 hours	
Reading list and references	(1) Chan, H., Lee, R., Dillon, T. and Chang, E., 2001, E-commerce: Fundamentals and Applications, John Wiley & Sons (UK). (2) Laudon, K.C. and Traver, C.G., E-commerce 2014, 10 th Edition, Prentice Hall, 2013. (3) Schneider, G., 2014, Electronic Commerce, Course Technology. (4) Stallings, W., 2013, Cryptography and Network Security: Principles and Practice, 6 th Edition, Prentice Hall. (5) Turban, E., <i>et al.</i> , 2010, Electronic Commerce 2010 - A Managerial Perspective, Prentice Hall.					