

Subject Description Form

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| 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 good knowledge of e-commerce and its applications; b) understand the enabling technologies for e-commerce; c) be aware of trends of e-commerce; and d) participate in team work, presentation and technical writing. | | | | | |
| 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 | | | | |

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| Student study effort expected | Class Contact: | |
| | Class activities (lectures, tutorials, lab(s)) | 39 hours |
| | Other student study effort: | |
| | Self-study, assignments, project, exam | 65 hours |
| | Total student study effort | 104 hours |
| Reading list and references | <p>(1) Chan, H., Lee, R., Dillon, T. and Chang, E., 2001, E-commerce: Fundamentals and Applications, John Wiley & Sons (UK).</p> <p>(2) Laudon, K.C. and Traver, C.G., E-commerce 2014, 10th Edition, Prentice Hall, 2013.</p> <p>(3) Schneider, G., 2014, Electronic Commerce, Course Technology.</p> <p>(4) Stallings, W., 2013, Cryptography and Network Security: Principles and Practice, 6th Edition, Prentice Hall.</p> <p>(5) Turban, E., <i>et al.</i>, 2010, Electronic Commerce 2010 - A Managerial Perspective, Prentice Hall.</p> | |