Subject Description Form

Subject Code	COMP 5131
Subject Title	Introduction to Information Systems
Credit Value	3
Level	5
Pre-requisite/Exclusion	Prerequisite: Nil Exclusion: COMP5139 Management Information Systems
Objectives	The objectives of this subject are to: 1. develop understanding and appreciation of the role of information systems in business environments to achieve competitive advantage; 2. provide fundamental knowledge in information system architectures and information technology infrastructure supporting them; 3. examine the state-of-the-art techniques and technologies that will contribute towards the future development of information systems and their applications; 4. develop the awareness in issues contributing to the successful planning, design, development, implementation and management of information systems.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) articulate the role of information systems in business environments; b) apply state-of-the-art technologies to fulfil the roles of information systems in real world setting; and c) communicate project findings and solutions effectively to peers and senior management in a company.
Subject Synopsis/ Indicative Syllabus	• **Information systems and the organizations**: Computers and the new business environment; strategic use of information systems; organizations and the role of information systems. • **Foundations of information systems:** Computer systems components; systems software; application software and development tools; trends in hardware and software technology; managing data resources; database manage systems and data modeling; data warehousing and future of data management. • **Communications and networks:** Components of telecommunication system; telecommunication networks; enterprise networking; internet and electronic commerce. • **Information Systems Development:** Overview of system development process; system implementation; alternative approaches to system development; system development methodologies.

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- **Organizational Support Systems:** Knowledge management and the organization; application of intelligent technologies; decision support systems; cooperative work support systems; executive support systems.
- **Managing Information Systems:** Computer security and integrity; assuring system quality; assuring data quality; ethical and social issues; managing and planning of computer and communication resources.

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<tr><td>Teaching/Learning Methodology</td><td>39 hours of Class activities including - lecture, tutorial, lab, workshop seminar where applicable</td></tr>
<tr><td>Assessment Methods in Alignment with Intended Learning Outcomes</td><td>
<table>
<tr><td rowspan="2">Specific Assessment Methods/Tasks</td><td rowspan="2">% weighting</td><td colspan="3">Intended subject learning outcomes to be assessed</td></tr>
<tr><td>a</td><td>b</td><td>c</td></tr>
<tr><td>Assignments, Tests & Projects</td><td>55</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>Final Examination</td><td>45</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>Total</td><td>100</td><td colspan="3"></td></tr>
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<tr><td>Student study effort expected</td><td>
<table>
<tr><td colspan="2">Class Contact:</td></tr>
<tr><td>Class activities (lecture, tutorial, lab)</td><td>39 hours</td></tr>
<tr><td colspan="2">Other student study effort:</td></tr>
<tr><td>Assignments, Quizzes, Projects, Exams</td><td>66 hours</td></tr>
<tr><td>Total student study effort</td><td>105 hours</td></tr>
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<tr><td>Reading list and references</td><td>
Text book
(1) Laudon K.C. & Laudon J.P., Management Information Systems: Managing the Digital Firm, 16th Edition, Pearson, 2020.
Reference books
(1) Raymond McLeod & George Schell, Management Information Systems, 10th Edition, Prentice Hall, 2007.
(2) R. Kelly Rainer, Jr., Efraim Turban, Introduction to information systems, 3rd Edition, Wiley, 2011.
Journals and articles
(1) Communications of ACM.
(2) Computer (IEEE Computer Society)
(3) MIS Quarterly.
(4) Journal of Management Information Systems
(5) Journal of Organizational Computing and Electronic Commerce
(6) Computerworld.
(7) Harvard Business Review
(8) Sloan Management Review
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