Subject Description Form

Subject Code	COMP5134
Subject Title	Information System Development with Object-Oriented Methods
Credit Value	3
Level	5
Pre-requisite/ Exclusion	Nil
Objectives	The objectives of this subject are to: 1. introduce IS development life cycle including information requirements determination, modelling, analysis and design, and implementation; 2. enable students to understand, apply and be able to distinguish between structured and object-oriented development methods; 3. enable the students with an in-depth understanding of the advanced concepts in the object-oriented approach to information system development.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) conduct critical analysis on business problems using the OO approach in a creative manner; b) design information system solution to real-life business problems using the OO approach; and c) articulate the strengths and weaknesses of OO solutions to business problems.
Subject Synopsis/ Indicative Syllabus	• **Introduction to System Development:** Systems Life Cycle, Information Requirement Analysis, Systems Analysis/Design, Implementation, Testing, Requirements Engineering. • **Development Method:** Agile, Iterative Development, UML • **OO Method:** Inheritance, Polymorphism, Design Patterns
Teaching/Learning Methodology	Class activities including - lecture, tutorial, lab, workshop seminar 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
	Assignments, Tests & Projects	55	✓	✓	✓
	Final Examination	45	✓	✓	✓
	Total	100			

Student study effort expected	**Class Contact:**	
	Class activities (lecture, tutorial, lab)	39 hours
	Other student study effort:	
	Assignments, Quizzes, Projects, Exams	66 hours
	Total student study effort	**105 hours**

Reading list and references	(1) Craig Larman, 2004, Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and Iterative Development, Prentice Hall (2) Bennett, S., Ray, Farmer, R., 2010, Object-Oriented Systems Analysis and Design Using UML, 4th Ed, McGraw-Hill.