

Subject Description Form

Subject Code	COMP 3235
Subject Title	Software Project Management
Credit Value	3
Level	3
Pre-requisite / Co-requisite/ Exclusion	Pre-requisite: COMP 3211
Objectives	<ol style="list-style-type: none"> 1. To provide students a systematic approach to initiate, plan, execute, control and close a software project. 2. To develop a good understanding of the nine project management areas, and the role of a typical project manager. 3. To equip students with understanding of the best practices, and techniques used in project management processes. 4. To enable students to gain a good understanding of ISO 9000 and CMMI.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <p><u>Professional/academic knowledge and skills</u></p> <p>(a) appreciate the importance of software project management;</p> <p>(b) apply project management techniques for information systems development;</p> <p>(c) apply the management skills to monitor and control a software project;</p> <p><u>Attributes for all-roundedness</u></p> <p>(d) work together as a team;</p> <p>(e) communicate in writing a technical document;</p> <p>(f) communicate effectively in English for general project presentation.</p>
Subject Synopsis/ Indicative Syllabus	<ol style="list-style-type: none"> 1. Project management fundamentals Attributes of project; project life cycle; project management processes; successful project manager; general management skills. 2. Project integration management Project plan; change control; configuration management; corrective and preventive action. 3. Project scope management Project charter; net present value; cost/benefit analysis; scope planning, definition, verification and change control. 4. Project time management

	<p>Project size and metrics; identifying activities; WBS; PBS; CPA; scheduling; critical chain.</p> <p>5. Project cost management Estimation techniques; earned value analysis; COCOMO; resource planning; value analysis; cost management plan, budgeting and control.</p> <p>6. Project quality management Quality model; quality definition; ISO 9001; CMMI; improvement cycle; trend analysis.</p> <p>7. Human resource management Organization structure; stakeholder analysis; team building; conflict; effective team; reward and recognition systems.</p> <p>8. Communication management Communication means; communication techniques for teams of different sizes; barriers to communication; building effective team communication; reviews; performance reporting.</p> <p>9. Risk management Different types of risk; risk response planning; risk analysis; risk monitoring and control.</p> <p>10. Procurement management Procurement planning; source selection; contract administration; contract closeout; negotiation.</p>																																																											
<p>Teaching/Learning Methodology</p>	<p>Lectures focus on introduction and explanation of key concepts and techniques. Tutorial and lab sessions provide students opportunity to practice the techniques and tools presented in class. Assignments and project allow students to deepen their understanding of the concepts taught in class and apply the theory and techniques to software process and project management. Students will be encouraged to work in groups to share and present ideas, review other's work, and develop teamwork skill.</p>																																																											
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<table border="1" data-bbox="483 1371 1437 1917"> <thead> <tr> <th data-bbox="483 1371 784 1528" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="792 1371 930 1528" rowspan="2">% weighting</th> <th colspan="6" data-bbox="938 1371 1437 1465">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th data-bbox="938 1465 1011 1528">a</th> <th data-bbox="1019 1465 1092 1528">b</th> <th data-bbox="1101 1465 1174 1528">c</th> <th data-bbox="1182 1465 1255 1528">d</th> <th data-bbox="1263 1465 1336 1528">e</th> <th data-bbox="1344 1465 1437 1528">f</th> </tr> </thead> <tbody> <tr> <td data-bbox="483 1528 784 1591">1. Assignments</td> <td data-bbox="792 1528 930 1917" rowspan="4">55%</td> <td data-bbox="938 1528 1011 1591">✓</td> <td data-bbox="1019 1528 1092 1591">✓</td> <td data-bbox="1101 1528 1174 1591">✓</td> <td data-bbox="1182 1528 1255 1591"></td> <td data-bbox="1263 1528 1336 1591"></td> <td data-bbox="1344 1528 1437 1591"></td> </tr> <tr> <td data-bbox="483 1591 784 1654">2. Lab exercises</td> <td data-bbox="938 1591 1011 1654">✓</td> <td data-bbox="1019 1591 1092 1654">✓</td> <td data-bbox="1101 1591 1174 1654">✓</td> <td data-bbox="1182 1591 1255 1654"></td> <td data-bbox="1263 1591 1336 1654"></td> <td data-bbox="1344 1591 1437 1654"></td> </tr> <tr> <td data-bbox="483 1654 784 1717">3. Project</td> <td data-bbox="938 1654 1011 1717"></td> <td data-bbox="1019 1654 1092 1717"></td> <td data-bbox="1101 1654 1174 1717"></td> <td data-bbox="1182 1654 1255 1717">✓</td> <td data-bbox="1263 1654 1336 1717">✓</td> <td data-bbox="1344 1654 1437 1717">✓</td> </tr> <tr> <td data-bbox="483 1717 784 1780">4. Mid-term</td> <td data-bbox="938 1717 1011 1780">✓</td> <td data-bbox="1019 1717 1092 1780">✓</td> <td data-bbox="1101 1717 1174 1780">✓</td> <td data-bbox="1182 1717 1255 1780"></td> <td data-bbox="1263 1717 1336 1780"></td> <td data-bbox="1344 1717 1437 1780"></td> </tr> <tr> <td data-bbox="483 1780 784 1843">5. Examination</td> <td data-bbox="792 1780 930 1843">45%</td> <td data-bbox="938 1780 1011 1843">✓</td> <td data-bbox="1019 1780 1092 1843">✓</td> <td data-bbox="1101 1780 1174 1843">✓</td> <td data-bbox="1182 1780 1255 1843"></td> <td data-bbox="1263 1780 1336 1843"></td> <td data-bbox="1344 1780 1437 1843"></td> </tr> <tr> <td data-bbox="483 1843 784 1917">Total</td> <td data-bbox="792 1843 930 1917">100 %</td> <td colspan="6" data-bbox="938 1843 1437 1917"></td> </tr> </tbody> </table> <p data-bbox="483 1959 1437 1980">Explanation of the appropriateness of the assessment methods in assessing the</p>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d	e	f	1. Assignments	55%	✓	✓	✓				2. Lab exercises	✓	✓	✓				3. Project				✓	✓	✓	4. Mid-term	✓	✓	✓				5. Examination	45%	✓	✓	✓				Total	100 %						
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	<p>intended learning outcomes:</p> <p>Assignments, project and mid-term test act as a measure on the understandings of the students on the basic concepts of the software project management.</p> <p>Project will be used to measure the understandings of the students about the current practice in process and project management. The students can improve their presentation and communication skills through the project presentation, and practice team work. Students can also develop their analytic and problem solving skills.</p> <p>Examination will be used as an overall measure of the understandings of the students on software project management.</p>	
Student Study Effort Expected	Class contact:	
	<ul style="list-style-type: none"> ▪ Lecture 	39 Hrs.
	<ul style="list-style-type: none"> ▪ Tutorial/Lab 	0 Hrs.
	Other student study effort:	
	<ul style="list-style-type: none"> ▪ Work on assignments and project, self study 	66 Hrs.
	Total student study effort	105 Hrs.
Reading List and References	<p>Textbooks:</p> <ol style="list-style-type: none"> 1. Cadle, J., Yeates, D., Project Management for Information Systems, Prentice Hall, 2006. <p>Reference Books:</p> <ol style="list-style-type: none"> 1. A Guide to the Project Management Body of Knowledge, Project Management Institute, 2008. 2. Hughes, B., Cotterell, M., Software Project Management, McGraw-Hill, 2009. 3. ISO standard. http://www.iso.ch 4. SEI.CMMI Tutorial, www.sei.cmu.edu/cmml/publications/stc.presentations/tutorial.html 	