



Bachelor of Science in Computer Science
Software Project I & II and Thesis Performance Evaluation

Title:					
Supervisor Name:					
<input type="checkbox"/> Software Project I	<input type="checkbox"/> Software Project II	<input type="checkbox"/> Thesis		Date of Defence:	
Student Name		Student ID	Contribution % (Total 100%)	Signature	

		Level of Domain*				PO Assessed**
		C	P	A	S	
CO1	<i>Select</i> all relevant resources in depth for designing an engineering solution & Determine the level of novelty of Project/Thesis			5		3
CO2	<i>Apply</i> in depth experiential analysis based on result acquired			6	CT	4
CO3	<i>Use</i> appropriate tools in modelling the diagrams (SP) <i>Use</i> appropriate research methods in conducting thesis		3		CT	5
CO4	<i>Choose</i> appropriate software engineering model in a software development environment (SP)			5	TS	6
CO5	<i>Determine</i> the impact on Environment and Sustainability			5		7
CO6	<i>Identify</i> the ethical issues that will arise in relation to conducting project and thesis [use of reference]	1				8
CO7	<i>Demonstrate</i> proof of proper individual effort and Teamwork		3			9
CO8	<i>Demonstrate</i> understanding with technical writing and presentation		3			10
CO9	<i>Demonstrate</i> proof of proper Project/Thesis Management and Finance		3			11
CO10	<i>Describe</i> the scope of independent and life-long learning	2				12

**The numbers under the 'Level of Domain' columns represent the level of Bloom's Taxonomy each CO corresponds to.*

****** *The numbers under the 'PO Assessed' column represent the PO each CO corresponds to.*

[illegible]

Assessment Title:	<i>Analyze</i> all relevant resources in depth for designing an engineering solution & Determine the level of novelty of project/Thesis	CO:	01
		PO:	03

Marking Criteria	Marks distribution (Maximum 5X4 = 20)				
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	Marks
Embracing Diverse Solution	Does not list or mentions alternative and divergent ideas and the approach considered has no justification	Lists out or mentions alternative and divergent ideas but only single approach is considered	Recognizes and evaluates alternate and divergent ideas or process to solve the problem	Integrates alternate and divergent ideas or process to solve the problem	
Contribution of the project	No apparent contribution of the work/project to the development of scientific concepts and it has not clearly identified and/or documented.	Some contribution of the work/project to the development of scientific concepts is identified but documentation lacks finesse.	Some contribution of the work/project to the development of scientific concepts is identified and documented.	The contribution of the work/project to the development of scientific concepts is identified and well documented.	
State of Art	Does not utilize the state-of-art technology and the results are obvious or easily anticipated.	Attempts to utilize the state-of-art technology but results can be expected to have a minor impact.	Utilizes the state-of-art technology but results can be expected to have a modest impact.	Makes the best use of state-of-art technology and produced a significant result that is likely to have a major impact.	
Creativity	The solution simply repeats already established/common knowledge (e.g. SWAT analysis).	Some creative solutions have been presented but does not improve on previous approaches.	Some creative solutions have been presented which incrementally improves on previous approaches.	Deep insight demonstrated and presents a creative solution to the real-life problem.	
Total Marks for PO3					

Assessment Title:		Apply in depth experiential analysis based on result acquired			CO:	02
					PO:	04
Marking Criteria	Marks distribution (Maximum 5X4 = 20)					
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	Marks	
Methods - Description of process and Setup	Description was general or did not include diagrams. Procedure was missing multiple steps. Information provided is not sufficient to replicate experiment.	Setup included descriptive text but diagrams were scarcely used. Hence analysis seemed vague and ambiguous to be replicated.	Setup included descriptive text and diagrams were provided if appropriate. Analysis can be reproduced using the steps provided.	Setup was documented completely. Method was also documented completely and accurately, making analysis easy to reproduce.		
Data Analysis	Data was incomplete. Only identified obvious trends or found trends not fully supported by the data	Most of the data was complete and Accurately labeled. But could not identify valid trends and could not make appropriate conclusions based on the data. Calculation documentations were not clear.	Most of the data was complete and accurately labeled. Identified valid trends and made appropriate conclusions based on the data. Documented calculations made during data analysis.	All data was complete and accurately labeled. Identified and described trends and made appropriate conclusions based on the data. Used statistical techniques to identify and analysis with appropriate calculations.		
Critical Reflection	No discussion and/or reflection on the research. Discussion only touches trivial or very general points of criticism.	Only most obvious conflicts and correspondences with existing literature are identified. The value of the study is described, but it is not related to existing research.	Mostly obvious and some critically identified conflicts and correspondences with existing literature. The value of the study is described and is mostly related to existing research.	Results are critically confronted with existing literature. In case of conflicts, the relative weight of own results and existing literature is assessed.		
Conclusion	Problem was restated. Conclusions were simplistic. No clear relationship between conclusions and hypothesis/objectives.	Problem was restated. Statements and conclusions were based on the data collected. But could not develop a strong relationship between conclusions and hypothesis.	Problem was restated. Statements and conclusions were based on the data collected. Showed a strong relationship between conclusions and hypothesis.	Restated problem and hypothesis. Justified design and methods of experiment. Findings were discussed in detail. Conclusions directly address hypothesis. Statements and conclusions were supported by the data.		
Total Marks for PO4						

Assessment Title:	Use appropriate tools in modelling the diagrams (Soft. Project) Use appropriate research methods in conducting THESIS	CO:	03
		PO:	05

Marking Criteria	Marks distribution (Maximum 5X3 = 15)				
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	Marks
Appropriateness	Methods/tools appear to be inappropriate or unrelated to purpose and research questions/software design	Methods/tools appear to be appropriate and related to purpose and research questions/software design	Methods/tools appear sound, appropriate and related to purpose and research questions/software design	Methods/tools are highly appropriate for this type of project and are directly linked to the purpose and research questions.	
Completeness	Incomplete and little description of methods/ diagrams	Partial description of methods/ diagrams	Moderately well written and mostly complete description of methods/ diagrams	Well written, detailed description of methods/ diagrams	
Data Analysis using Tools/Methods	By using the adopted tools/ methods the data analysis is incomplete and inappropriate for the research/ project	By using the adopted tools/ methods the data analysis appears to be appropriate for the research/ project but needs significant refinement	By using the adopted tools/ methods the data analysis is appropriate for the research/ project but needs some refinement.	By using the adopted tools/ methods the data analysis is highly appropriate for the research/ project and needs little or no refinement.	
Total Marks for PO5					

Assessment Title:	<i>Choose appropriate software engineering model in a software development environment</i>	CO:	04
		PO:	06

Marking Criteria	Marks distribution (Maximum 5X3 = 15)				
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	Marks
Content Knowledge of the project/thesis	Student does not have grasp of information and cannot answer the questions about subject.	Student is uncomfortable with information and is able to answer only basic questions.	Student is at ease with content but fails to elaborate concept of the project/thesis	Student demonstrates full knowledge (more than required) with explanations and elaboration.	
Argumentation of Method selection	Does not articulate a position or argument.	Articulates a position or argument that is unfocused or ambiguous	Articulates a position or argument that is incomplete or limited in scope	Clearly articulates a position or argument	
Evidence of Argumentation	Doesn't present enough evidence to support argument, even when prompted repeatedly	Does not present enough evidence to support argument, but augments when prompted	Presents limited evidence to support argument	Presents sufficient amount of evidence to support argument	
Total Marks for PO6					

Assessment Title:	<i>Determine the impact of Environment and Sustainability</i>	CO:	05
		PO:	07

Marking Criteria	Marks distribution (Maximum 5X3 = 15)				
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	Marks
Impact on Environment	Design project does not include or includes content/information that shows little or no understanding of the impact on environment	Design project includes limited understanding of project/thesis impact on the environment	Design project includes content/information that shows adequate understanding of the impact on the environment	Design project includes all possible content/information that shows good understanding of the impact on the environment	
Life cycle analysis	Design project does not include or includes content/information that shows little or no understanding of Life cycle analysis	Design project includes content/information that shows some understanding of Life cycle analysis	Design project includes content/information that shows adequate understanding of Life cycle analysis	Design project includes all possible content/information that shows good understanding of Life cycle analysis	
Uncertainty analysis	Design project does not include Uncertainty analysis with no technique to achieve sustainability	Design project includes some content/information that shows some Uncertainty analysis but a proposed technique to achieve sustainability	Design project includes some content/information that shows adequate Uncertainty analysis but a proposed technique to achieve sustainability	Design project includes all possible content/information of Uncertainty analysis and includes innovative technologies to achieve sustainability	
Total Marks for PO7					

Assessment Title:	<i>Identify</i> the ethical issues that will arise in the design of the system	CO:	06
		PO:	08

Marking Criteria	Marks distribution (Maximum 5X4 = 20)				
	Inadequate (1)	Satisfactory (2)	Good (3)	Excellent (4)	Marks
Stakeholder Perspective	Students identify few and/or most obvious stakeholders, perhaps stating their positions in a limited way and/or misrepresenting their positions.	Students explain the perspectives of general stakeholders and convey these.	Students explain the perspectives of major stakeholders and convey these with reasonable accuracy.	Students thoughtfully consider perspectives of diverse relevant stakeholders and articulate these with great clarity, accuracy, and empathy.	
Ethical Issues Identification	Students begin to frame the Ethical Issues, but have difficulty separating primary and secondary problems. If approaches to address the problem are advocated, they are quite general and may be naive.	Students can distinguish primary and secondary Ethical Issues. There is evidence that they have begun to formulate credible approaches to address Ethical Issues.	Students are generally successful in distinguishing primary and secondary Ethical Issues with justification. There is evidence that they have begun to formulate credible approaches to address Ethical Issues.	Students convincingly and accurately frame the Ethical Issues and parse it into sub-problems, providing justification. They suggest detailed and viable approaches to resolve the Ethical Issues.	
Code of Ethics Consideration	Students give passing attention to related Code of Ethics considerations. They may focus only on obvious health and safety considerations and/or fair use of funds involving primary stakeholders.	Students are sensitive to relevant Code of Ethics considerations. Students make linkages between ethical considerations and stakeholder interests. Students may identify ethical dilemmas.	Students are sensitive to relevant Code of Ethics considerations and discuss them in context of the problem(s). Students make linkages between ethical considerations and stakeholder interests. Students may identify ethical dilemmas and discuss possible tradeoffs.	Students clearly articulate relevant Code of Ethics considerations and address these in discussing approaches to resolve the problem(s). Students make linkages between ethical considerations and stakeholder interests and discuss ways to mediate dilemmas or suggest tradeoffs.	
Conclusions and related outcomes (implications and consequences)	Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.	Conclusion is tied to information (because information is chosen to fit the desired conclusion);	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes are not clear.	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence.	
Total Marks for PO8					

Assessment Title:	<i>Demonstrate</i> proof of proper individual effort and Teamwork	CO:	07
		PO:	09

Marking Criteria	Marks distribution (Maximum 5X4 = 20)				
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	Marks
Work planning and execution	Lack of planning and poor execution of generic plans.	Planning is done successfully but no execution of planned activities.	Some of planning and execution of planned activities was not established appropriately.	Well planned project and activities are in order according to chronology. Execution follows as planned in Gantt chart.	
Meeting Deadlines	Major the deadlines were not met and some of the requirements (documents, files, forms etc) were missing.	Few deadlines were met but some of the requirements (documents, files, forms etc.) were missing.	Most of the deadlines were met but some of the requirements (documents, files, forms etc.) were missing.	All/Most of the deadlines were met with most of the requirements (documents, files, forms etc.)	
Budget	Little or No project budget was done, and expenses were irrational.	The project budget was not done appropriately and some of the expenses exceeded the market value.	The project budget was not done appropriately and some of the expenses exceeded the market value.	The project budget was done appropriately, and overall expenses of the project was reasonable (in compare with market value).	
Project Value	Project Value exceed too much to the current market value and have no Profitability.	Project Value is unreasonable to the current market value and may have limited Profitability.	Project Value is unreasonable to the current market value and may have limited Profitability.	Project Value is reasonable to the current market value and have promising Profitability.	
Total Marks for PO9					

Assessment Title:	<i>Demonstrate</i> understanding with technical writing and presentation	CO:	08
		PO:	10

Marking Criteria	Marks distribution (Maximum 5X4 = 20)				
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	Marks
Abstract Quality	Project goal was poorly stated, capstone summary was unclear or too technical. There were several writing errors.	Project goal & capstone summary were clear but very technical. There were a few writing errors.	Project goal & capstone summary were clear and not overly technical. There were a few writing errors.	Project goal & capstone summary were clear, concise, and non-technical. There were no writing errors.	
Background information and project goals	Insufficient background information is given; project goals and benefits are poorly stated or missing.	Sufficient background information is given but the purpose and goals of the project require further elucidation.	Sufficient background information is given; the purpose and goals of the project are adequately explained.	Thorough and relevant background information is given; project goals are clear and easy to identify.	
Design approach, testing, and results	Approach to the problem is weak or flawed. Tests are inconclusive. Results are disappointing or incomplete.	Approach to the problem is adequate. Testing is conclusive but lacks diversity in test cases. Results therefore lack completeness.	Approach to the problem is adequate. Testing is good. Results are acceptable and complete.	Approach to the problem is innovative. Testing is thorough, and results are robust and usable.	
Information conveyed about design process and results	Information is missing or difficult to understand; further explanation is often needed.	Information is present but lacks proper elucidation and at times is difficult to understand.	Information is present but at times is difficult to understand.	Information is thorough and relevant and at times enriches viewer's knowledge and interest.	
Total Marks for PO10					

Assessment Title:	<i>Demonstrate</i> proof of proper Project Management and Finance	CO:	09
		PO:	11

Marking Criteria	Marks distribution (Maximum 5X4 = 20)				
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	Marks
Contribution to the team project/work	Does not collect any relevant information; no useful suggestions to address team's needs;	Collects basic, useful information related to the project but does not offer sufficient useful ideas to meet the team's needs;	Collects basic, useful information related to the project; occasionally offers useful ideas to meet the team's needs;	Collects and presents to the team a great deal of relevant information; offers well-developed and clearly expressed ideas directly related to the group's purpose.	
Taking responsibility	Does not perform assigned tasks; often misses meetings and, when present, does not have anything constructive to say; relies on others to do the work;	Partially performs all assigned tasks; attends meetings irregularly and occasionally participates and hence not reliable;	Performs all assigned tasks; attends meetings regularly and usually participates effectively; generally reliable;	Performs all tasks very effectively; attends all meetings and participates enthusiastically; very reliable.	
Valuing other team members	Often argues with team mates; doesn't let anyone else talk; occasional personal attacks and "put-downs"; wants to have things done his way and does not listen to alternate approaches;	Seldom listens to others' points of view; occasionally behaves in an oppressive manner; tries to force own ideologies on other;	Generally, listens to others' points of view; always uses appropriate and respectful language; tries to make a definite effort to understand others' ideas;	Always listens to others and their ideas; helps them develop their ideas while giving them full credit; always helps the team reach a fair decision.	
Work Distribution	Work load was not distributed equally and reasonable. Overall workload taken was not prominent or effective.	Workload was distributed perjuriously and unfairly; output of the work lacked completeness due to unrealistic deadlines	Acceptable work load was taken, and justified output of the work was demonstrated or presented	Equal or Most of the work was taken by the member and well justified output were demonstrated.	
Total Marks for PO11					

Assessment Title:	<i>Describe the scope of independent and life-long learning</i>	CO:	10
		PO:	12

Marking Criteria	Marks distribution (Maximum 5X3 = 15)				
	Inadequate (1-2)	Satisfactory (3)	Good (4)	Excellent (5)	Marks
Motivation of the work	Explores the project/thesis topic at a surface level, providing minimal insight indicating low interest in the subject area	Explores the project/thesis topic with some evidence of depth, providing occasional insight indicating mild interest in the subject area.	Explores the project/thesis topic with evidences awareness indicating interest in the area.	Explore the project/thesis topic with evidences rich awareness indicating intense interest in the area.	
Critical Thinking	Recalls Functional/ Procedural knowledge of existing solutions	Explains the existing solutions and applies in cases	Analyses and Evaluates Conditional/Declarative knowledge with elements	Understands the concepts very well and creates new knowledge	
Future studies	Little or no discussion is present in the report about the scope of future studies in the subject area	The scope of future studies in the subject area is stated in the report	The scope of future studies is stated and discussed in some details in the report	The scope of future studies is stated and discussed elaborately with details of how this study can be extended in future endeavored	
Total Marks for PO12					

Total Marks (180)	Converted into 100%	Letter Grade

Name of Examiner	Designation

Name of External (if any)	Designation