

**Group # \_\_\_\_\_ Final Project Report Grading Form ENGG\*3100: Winter 2010**

	Outstanding									Unacceptable/missing	
	10	9	8	7	6	5	4	3	2	1	0
Category											
<b>PROBLEM DEFINITION</b>											
Intro, background & problem statement (5 marks)	Clearly and concisely identifies and discusses the problem and context.	Identifies and discusses the problem and context	Identifies the problem and context	Presents a general statement of the problem or context.	Fails to identify problem or context.						___ x 0.5/5
Criteria, constraints and assumptions (5 marks)	Clearly and concisely identifies and discusses the most important constraints, assumptions and criteria	Identifies and discusses major constraints, assumptions and criteria	Identifies the constraints, assumptions and criteria	Identifies a few constraints, assumptions and criteria	Fails to identify any criteria, constraints or assumptions						___ x 0.5/5
Literature review & references (5 marks)	Provides extensive critical review of relevant prior research and state of the art. Many references to expert opinion and/or databases are included.	Provides good critical review of relevant prior research and state of the art. Some references to expert opinion and/or databases are included.	Provides useful review of relevant prior research and state of the art	Provides an incomplete review of some relevant prior research and state of the art.	Provides poor review of relevant prior research and state of the art.						___ x 0.5/5
Plagiarism	All sources cited properly. No claims to someone else's work suspected.									Failure to correctly cite any of the sources. Plagiarism suspected	
<b>TECHNICAL</b>											
Conceptual modelling (7 marks)	Excellent development of conceptual design including: full documentation of functional requirements, careful problem decomposition, and thorough evaluation against well-defined constraints and criteria.	Very good development of conceptual design including: documentation of functional requirements, problem decomposition, and reasonable evaluation against constraints and criteria.	Good development of conceptual design including most of these activities: partial documentation of functional requirements, good problem decomposition, and evaluation against constraints and criteria.	Poor development of conceptual design that lacks careful analysis of functional requirements and problem decomposition.	Failed to develop conceptual design.						___ x0.7/7
Modelling and Analysis (10 marks)	Excellent and accurate modelling and analysis of conceptual design that focus on the most important design parameters and criteria.	Accurate modelling and analysis of conceptual design that focus on major design parameters and criteria.	Some modelling and analysis of conceptual design that focus on design parameters and criteria.	Poor modelling and analysis of conceptual design with weak reference to design parameters and criteria.	Lack of demonstrated modelling skills. Failed to analyze conceptual design. No reference to design parameters and criteria.						___/10
Testing and evaluation (10 marks)	Thorough testing and evaluation of the design using appropriate methods. Testing cases are fully documented and justified. Thoughtful, concise and insightful discussion of the design testing results and evaluation against constraints and criteria.	Complete testing and evaluation of the design using appropriate methods. Testing cases are well documented and justified. Complete discussion of the design testing results and evaluation against constraints and criteria.	Fair testing and evaluation of the design using appropriate methods. Testing cases are documented and justified. Fair discussion of the design testing results and evaluation against constraints and criteria.	Some testing and evaluation of the design using some methods. Poor documentation of testing cases. Brief discussion of the design testing results and evaluation against constraints and criteria.	No or missing testing and evaluation of the design. Use of wrong method to test the design.						___/10
Calculations, drawings & sketches (5 marks)	Shrewdly supported by excellent data, graphs and drawings	Supported by very good data, graphs and drawings	Supported by good data, graphs and drawings	Some data, graphs and drawings	Scattered data, graphs and/or drawings						___ x0.5/5

Cost evaluation (5 marks)	Careful and accurate prediction of design cost based on available data and reasonable assumptions. Presented in a manner useful to the client.	Accurate prediction of design cost based on available data and reasonable assumptions.	Provides a prediction of design cost based on some data and reasonable assumptions.	Provides a prediction of design cost based on some wrong data and assumptions, or omits some important costs.	Cost estimate is seriously flawed or missing.	____x 0.5/5	
Conclusions & recommendations (8 marks)	Excellent summary of design process and result, insightful recommendations for future design development and implementation.	Very good summary of design process and result, useful recommendations for future design development and implementation.	Satisfactory summary of design process and result, some recommendations for future design development and implementation.	Fair summary of design process and result, gives recommendations for future design development and implementation.	Poor summary of design process and result, few or irrelevant recommendations for future design development and implementation.	____x 0.8/8	
DELIVERABLES (Not all categories relevant for all projects.)						Relevant to project?	
Drawings	Complete set of detailed, accurate drawings includes assemblies, systems and individual components. Details of parts and assemblies are clear to observer. Clear and correct labelling and dimensioning. Proper drawing types utilized (e.g. construction plans, circuit diagrams, process diagrams).		Set of accurate drawings that includes assemblies, systems and individual components, such that the design solution is clear. Appropriate labelling and dimensioning. Proper drawing types utilized (e.g. construction plans, circuit diagrams, process diagrams).		No drawings provided, or are illegible, or are substantially incomplete with many elements not documented. Drawings contain many errors, inaccuracies or are not consistent with reported design.	Yes	No
Prototype	Successful demonstration of a functional prototype that proves the validity of the design concept.		Demonstration of a prototype that validates important aspects of the design solution.		No prototype or mock-up available or provided. Prototype or mock-up is not consistent with project.	Yes	No
Bill of Materials	Complete listing of needed materials with accurate quantities, with descriptions and sources as appropriate.		Listing of needed material, including all major elements. Quantities of materials are consistent with report.		No Bill of Materials provided, or major components omitted.	Yes	No
Simulation	Appropriate simulation methods utilized successfully to predict performance of design solution. Simulation explanations give high confidence that conclusions drawn from simulation are correct.		Simulation utilized to predict most important aspects of design performance. Explanations give confidence that simulations were performed correctly. Conclusions drawn from simulation are reasonable.		Simulations completed are erroneous or completely irrelevant, or do not support conclusions.	Yes	No
Sensitivity Analysis and Optimization of Criteria	Sensitivity analysis performed on most relevant variables clearly showed that design is cost and performance optimized.		Some sensitivity analysis performed on reasonable aspects of design. Results applied to optimization of the design.		No evidence of sensitivity analysis. No evidence of design optimization.	Yes	No
Overall Deliverables (Average of relevant sections)						____ / 20	

## PRESENTATION

Letter of Transmittal/ Executive Summary (3 marks)	Focused summary/Key aspects of work highlighted/Reader's attention directed effectively	Competent summarizing/ Most key aspects featured/ Some gaps in coverage	Coverage sufficient for use, but key features downplayed, not covered/Attention wanders	Highly apparent gaps in coverage/ Focus seems incomplete or misdirected	Missing or insubstantial content/Little effect for directing reader's attention ____x 0.3/3
Document Sections (4 marks)	Informative headings/Initial sentence(s) focus attention on concept/Logically organized/Highly informative coverage of topic (point by point)/Expected outcomes of Report strongly supported by data/No section repeats topics information, conclusions from others.	Headings not completely consistent/May have missing focus sentences &/or logical links/Coverage mostly complete but may have data missing or misplace/Outcomes have reasonable support/Little, if any, repetition between sections	Headings mostly structural, not topical/Erratic use of focus sentences/Logic not consistently ensured/Support & conclusions only adequate, not consistent or effective/Repetition of assertions and data points shows up regularly	Very few topical headings or focus sentences/Absence of carefully worked out logic/ Support from data erratic/ Conclusions often absent/ Repetition of assertion, data points, even conclusions shows up often & pointlessly	Little or no consistency in structure of sections/ Development sloppy & overall conclusions missing or not acceptably worked out/Frequent & pointless repetition ____x 0.4/4
Paragraphs (5 marks)	Consistently focused on one concept or part/ Effective coverage by data points & explanation/Sentences informative & logically linked/Moves steadily through the concept (or aspect) to support section development/No needless repetition between Paragraphs.	Focus efforts largely consistent/ Coverage mostly effective/ Sentences have few lapses in content & construction/ Significant additions to section development/Any repetition clearly needed	Increased inconsistency in focus & coverage/Sentences have somewhat weakened construction & only moderately informative content/Section development not strongly supported/Repeated statement of ideas and/or data points	Little consistency in focus & coverage/Sentences lack logical construction & may require re- reading to understand content/ Section development receive little support/Ideas & interpretation repeated without need or justification	Focus, coverage & information development inconsistent/ Provide little or no support for accepting work as valid ____x 0.5/5
Sentences (5 marks)	Correctly & effectively constructed (Grammar & Punctuation)/Makes use of Core Subject technique/ Logical connections established consistently/Consistently informative	Minor errors in construction & effectiveness/May miss Core Subject & logical connections occasionally/Almost always informative	Several noticeable errors in construction/Increasingly miss Core Subject & ignores logical connections/Information level of individual sentences only average	Major sentence problems in construction & Grammar (Fragments & Run-on)/Few Core Subject employed/ Logical connections missing/Low information levels	Consistent sentence construction problems/Absence of Core Subjects & logical linking/ Information development ignored ____x 0.5/5
Style (3 marks)	Phrasing & terminology accurate/ Highly helpful to Reader's understanding of project/Edited for spelling, typos, all mechanics	Mostly consistent application of techniques, with only minor lapses or misjudgements	Adequate but not consistently effective Style application	Weakened presentation of information & argument through Style	Apparent lack of interest in effective presentation because of absence of effort to apply Style ____x 0.3/3

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TOTAL MARK

/100