

PART A - Assessment task 1 – Project Proposal and Risk Assessment = 15%

Criteria	Weight	Levels of achievement (The standard of performance)				
		HD	DI	CR	PA	NN
<i>Quality and completeness of the summary and problem statement</i>	20%	An exemplary proposal that is clear, comprehensive and thorough to engineering/industry standard. The summary and statement of problem are clear and set the project path without any ambiguity.	A proposal that is clear and convincing to engineering/industry standard. The summary and statement of problem are clear and set the project path without any ambiguity.	A proposal that is mostly clear. The summary and statement of problem are mostly clear, but further clarification is required to make them engineering/industry standard.	Communicates somewhat in clear manner, but some work is required to set the problem statement at engineering/industry standard.	Demonstrates poor communication with no clear usage of appropriate engineering language/terminology. The summary and statement of problem are confusing.
<i>Appropriateness of the literature review</i>	30%	An exemplary, journal quality background literature review is provided. The proposal distinctly identifies the gap and shows a very clear direction to seek a solution that is innovative and based on solid research.	A very good background literature review is provided. The proposal identifies the gap in the literature and includes a comprehensive set of design/research questions that will provide a clear guide for a good project.	A reasonably good literature review, supplemented by standard design/research questions. Some clarification is required to link the design/research questions to the literature.	The literature review misses some key papers/technologies/relevant material. The design/research questions are weakly linked to the literature and further work is required to properly adjust them.	A poor literature review with significant key papers/technologies/relevant material missing. The design/research questions are not supported by the literature and significant further work is required to properly adjust them.
<i>Proposed project plan, design method, project budget</i>	30%	A systematic approach to the engineering design process that demonstrates a clearly applied understanding of established engineering and design methods to solve complex engineering problems. A comprehensive set of innovative design/research questions are identified that will provide a clear guide for an innovative project.	A clear approach to the engineering design process demonstrating a very good understanding of engineering and design methods to solve complex problems.	A good understanding of engineering and design methods displayed with some need for more explanation throughout.	A basic understanding of engineering and design methods that needs much more depth to show how it can be applied.	No clear understanding or application of a systematic approach to the engineering design process.
<i>Comprehensive risk assessment and ethical consideration relevant to the project.</i>	20%	A comprehensive risk assessment that clearly outlines all major risks to the project completion and analyses the impact of those risks on a successful project and shows an in depth understanding of risk mitigation. Sound ethics clearly demonstrated. Extremely clear work schedule, key responsibilities carefully outlined, subtasks and stages of the project appropriately identified and a clear plan to manage on time and in budget set out.	A very good risk analysis that demonstrates clear responses to risk mitigation. The mitigation strategies need minor adjustment. Ethically sound. A good work schedule with most subtasks and stages of the project outlined. A good overview of how to keep to time and budget included which could benefit from some contingency planning.	A clear risk analysis that touches on most risks for the project. The mitigation strategy is not complete and needs further clarification. Consideration of ethics demonstrated. A good overview of the work schedule that could benefit from more depth.	Some risk analysis identified but needs more depth and clarity and does not demonstrate a solid understanding of risk or mitigation. Missing some important risks. Touches on ethics in the overall plan. Some attempt at using project management tools that would need to be applied more efficiently to keep the project on track	No understanding of risk analysis and mitigation strategies demonstrated. Does not demonstrate any consideration to ethical planning. Unclear project roles and responsibilities.