

Appendix 1: Description of project report progress (supervisor and panel evaluation form)

Item	Description
Abstract	<i>Abstract is considered excellent if it is presented in brief with content covering all necessary elements i.e. background of project, problem statement and objectives, proposed idea, research methodology and expected results</i>
B-2: Motivation	<i>Motivation is considered excellent if it is supported by facts and figures and covering all necessary elements i.e. contribute to solve local or global problem.</i>
B-3: Problem Statement	<i>Problem statement is considered excellent if covers all necessary elements i.e. description of research variables, problem is complex, require the use of fundamental engineering knowledge</i>
B-4: Objective	<i>Objective is considered excellent if the covers all the necessary elements i.e. specific, measurable, achievable, relevant and time bound</i>
B-5: Scope	<i>Scope is considered excellent if it describe the boundary of research in terms of measurable outcome and research methodology</i>
B-6a: Analysis of information	<i>Analysis means breaking information into smaller parts</i>
B-6b: Synthesis of information	<i>Synthesis means deriving new information by integrating information. Student could perform comparative study to find link, difference or change and to find trade off</i>
B-6c: Evaluation of information	<i>Giving value to knowledge that is gain from literature</i>
B-7a: Validity of method	<i>Validity shows whether the evidence really provide the answer to the research questions or the design requirement. Student should discuss validity in terms of how the following items may invalidate the results. Design of experiment, measurement, presentation of result, interpretation of result, conclusion etc.</i>
B-7b: Reliability of data	<i>Reliability shows whether we can trust the measurement made during the experiment/simulation. Reliability is well described if student discussed influential factors such as the effect of error, uncertainties in making measured variables.</i>
B-8: Early Result	<i>Early result refers to preliminary output of the research. It can be hypothesis or result of simulation or pre-lab testing, or etc.</i>
B-9: Conclusion and Future Work	<i>Conclusion includes whether the findings supported the hypothesis or design objective, possible sources of error, and what was learned from the experiment. Future work explains the tasks to be carried out in FYP 2.</i>

Appendix 2: Rubrics report progress (supervisor and panel evaluation form)

PROJECT PROGRESS REPORT					
	0	0.1-2.5	2.6-5.0	5.1-7.5	7.6-10
Abstract	No abstract shown in the report	Abstract is poorly described and/or missing a lot of the elements	Abstract is moderately described and/or missing some of the elements	Abstract is well described with acceptable explanation for each elements	Abstract is excellent and cover all elements
B-2: Motivation	No motivation shown in the report	Motivation is poorly described	Motivation is moderately described and/or missing some of the elements	Motivation is well described with acceptable explanation for each elements	Motivation is excellent and cover all elements
B-3: Problem Statement	No problem statement shown in the report	Problem statement is poorly described and/or missing a lot of the elements	Problem statement is moderately described and/or missing some of the elements	Problem statement is well described with acceptable explanation for each elements	Problem statement is excellent and cover all elements
B-4: Objective	No objective shown in the report	Objective is poorly described and/or missing a lot of the elements	Objective is moderately described and/or missing some of the elements	Objective is well described with acceptable explanation for each elements	Objective is excellent and cover all elements
B-5: Scope	No scope shown in the report	Scope is poorly described	Scope is moderately described and/or missing some of the elements	Scope is well described with acceptable explanation for each elements	Scope is excellent and cover all elements
B-6a: Analysis of information	No analysis of literature shown in the report	Literature is poorly analyzed	Literature is moderately analyzed	Literature is well analyzed	Excellent analysis of literature
B-6b: Synthesis of information	No synthesis of literature is shown in the report	Literature is poorly synthesized	Literature is moderately synthesized	Literature is well synthesized	Excellent synthesis of literature
B-6c: Evaluation of information Methodology	No evaluation of literature shown in the report	Literature is poorly evaluated	Literature is moderately evaluated	Literature is well evaluated	Excellent evaluation of literature
B-7a: Validity of method	Methodology is not acceptable.	Methodology is poor and hard to understand	Methodology is acceptable but some details are missing.	Methodology is acceptable but details are fairly covered	Methodology is correct, well described and most details are covered.
B-7b: Reliability of data	No reliability	Reliability is poorly described	Reliability is moderately described	Reliability is acceptable	Reliability is well described
B-8: Early Result	No result or hypothesis shown in the report	Result is poorly analyzed or hypothesis is unclear	Result is moderately analyzed or hypothesis is moderately discussed	Result is analyzed or hypothesis discussion is acceptable	Results is well analyzed or hypothesis is comprehensively discussed
B-9: Conclusion and Future Work	No report conclusion shown in the report.	Report is poorly concluded and/or missing a lot of the elements.	Report is moderately concluded and/or missing some of the elements. Future work is poorly explained.	Report is well concluded with acceptable explanation for each element. Future work is moderately explained.	Report conclusion is excellent and covers all the elements. Future work is comprehensively explained.

Appendix 3: Rubrics for report presentation and writing skill (panel evaluation form)

PROJECT REPORT PRESENTATION & WRITING SKILLS					
	0	0.1-2.5	2.6-5.0	5.1-7.5	7.6-10
C-1:References	No reference	Poor reference sources and incorrect referencing format.	Moderate reference sources and incorrect referencing format.	Acceptable reference sources or follow standard format of referencing.	Good reference sources and follow standard format of referencing
C-2:Report Format	Not follow guideline	Poor Report format compare to guideline	Moderate format	Acceptable Report format	Report format follows standard
C-3a: Organization	Information is mess	Information is poorly organized	Information is moderately organized	Information is acceptable organize	Information is well organized
C-3b: Paragraphs	No paragraph	Paragraphs is poorly written	Paragraphs is moderately written	Paragraphs is acceptable written	Paragraphs is well written
C-3c: Diagram and illustration	Diagram can't be understand	Diagrams and illustrations is poorly presented	Diagrams and illustrations are moderately presented	Diagrams and illustrations are acceptable presented	Diagrams and illustrations are well presented

Appendix 4: Rubrics for seminar (seminar evaluation form)

SEMINAR					
	0	0.1-2.5	2.6-5.0	5.1-7.5	7.6-10
D-1:Contents	The contents are confusing. Does not seem to understand the project very well. Unable to accurately answer questions.	The contents are generally correct but there seem inaccurate information. Does not seem to understand the project very well. Unable to accurately answer questions.	The contents are generally correct but there seem inaccurate information. Shows a good understanding of parts of the project. Able to accurately answer a few questions.	The contents are mostly correct. Shows a good understanding of the project. Able to accurately answer most questions well.	The contents are all correct and support the main ideas. Student shows a full understanding of the project. Able to accurately answer almost all questions well.
D-2:Presentation Skills	Presentation is difficult to comprehend.	Presentation slides are poor. Explanation is understandable	Presentation slides are moderate. Explanation is understandable.	Presentation slides are acceptable. Explanation is clear and understandable.	Well-organized of presentation slides. Explanation is clear and highly convincing.
D-3: Project Progress	No initial works	Initial works is poorly described	Initial works is moderately described	Initial works is acceptably described	Initial works is well described
D-4: Project Prospect	Project is not suitable for commercialization or practical application or not contribute to research advancement	Project is not relevant but suitable for commercialization or practical application.	Project is relevant and suitable for commercialization, but is not a complete project.	Project is adequate and suitable for commercialization, but leaves some unanswered questions.	Project is well-constructed and suitable for commercialization or contribute to research advancement.