Subject Description Form

Subject Code	EIE4433
Subject Title	Honours Project
Credit Value	6
Level	4
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	Engineering is the science of solve problems by applying scientific principles and technology in order to improve human life. This may take the form of invention, design, implementation, so on and so forth. It is important for students to have the chance to design and implement solutions to existing problems while considering various constraints. They will also have the chance to apply the knowledge they have learned throughout the curriculum. The Honours Project (also called Final-Year Project or FYP in short) in the curriculum is designed with the following objectives: 1. To provide the opportunity to the students so that they can apply what they have learnt in previous stages in a real-life engineering context. 2. To enable the students to acquire and practise project management skills and discipline while pursuing the Honours Project. 3. To enable the student to apply engineering knowledge in analysis of problems and synthesis of solution while considering various constraints.
Intended Subject Learning Outcomes	**Upon completion of the subject, students will be able to:** <u>Category A: Professional/academic knowledge and skills</u> 1. Understand the background, the requirements, objectives, and deliverables to be produced for the specific project. 2. Apply knowledge and skills relevant to electronic and information engineering to achieve the objectives of the project. 3. Learn to use new tools and facilities, and to gather new information, for the conduction of the project. <u>Category B: Attributes for all-roundedness</u> 4. Work under the guidance of a supervisor while exercising self-discipline to manage the project. 5. Communicate effectively with related parties (supervisor, peers, vendors, ..etc.). 6. Work with others (team partners, outsource company, technical support staff, ...etc.) collaboratively. 7. Realize different constraints when designing solutions.
Subject Synopsis/ Indicative Syllabus	**Syllabus:** The progression of the project will consist of the following stages. <u>Project Specification</u> In this stage, the student will work in conjunction with the project supervisor to draw up a concrete project plan specifying at least the following: 1. Background of the project 2. Aims and objectives 3. Deliverables 4. Methodology to be adopted 5. Schedule

Project Execution

After the specification is done, the project will be pursued so that the objectives are to be met; the deliverables are to be produced in accordance with the schedule. The student and the project supervisor will meet constantly to discuss the progress. In particular the following should be demonstrated:

1. Adherence to the schedule
2. Achievement of objectives by the student's work
3. Initiatives of the students to work, design, and to solve problems
4. Inquisitiveness of the student (e.g. to probe into different phenomena or to try different approaches)
5. Diligence of the students to spend sufficient effort on the project
6. Systematic documentation of data, design, results, …etc. during the process of working out the project

Project Report

After the project is finished, it is important that the student is competent in disseminating the results for others to review. Through this dissemination process, project achievements can be communicated, experience can be shared, knowledge and skills learnt can be retained and transferred. The following elements will be important as evidence of students' achievement:

1. Project log book (documenting the work done over the year)
2. Project report (hardcopy and softcopy)
3. Presentation
4. Performance in a Question-and-Answer session
5. Demonstration

Assessment Methods in Alignment with Intended Subject Learning Outcomes

Specific Assessment Methods/ Task	**% Weighting**	**Intended Subject Learning Outcomes to be Assessed (Please tick as appropriate)**						
		1	**2**	**3**	**4**	**5**	**6**	**7**
Continuous Assessment	100%	✓	✓	✓	✓	✓	✓	✓
Total	100%							

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Specific Assessment Methods/Tasks	**Remark**
Continuous assessment	The assessment of the project work is done continuously throughout the whole project period. The evidence of students' achievement will be documented in log book and the reports submitted in various stages. The student will be required to give a presentation and demonstration so that he/she can communicate the project design, methodology, and achievement to other parties.

Student Study Effort Expected	**Class contact (time-tabled):**	
	• Structured Study (regular meetings with supervisor)	78 Hours
	Other student study effort:	
	• Guided Study/Reading/Experiment	90 Hours
	• Reports	30 Hours
	• Presentation and demonstration	12 Hours
	Total student study effort:	**210 Hours**
Reading List and References	**Reference Books and Papers:** *To be specified by the project supervisor for each project.*	
Last Updated	June 2015	
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