Module Code	**EEU44EE2**
Module Name	Electronic and Electrical Engineering Project
ECTS Weighting[1]	20 ECTS - Capstone
Semester taught	Semester 1 & 2
Module Coordinator/s	Dr Aleksandra Kaszubowska-Anandarajah
Module Learning Outcomes with reference to the Graduate Attributes and how they are developed in discipline	On successful completion of this module, students should be able to: 1. Derive, apply and adapt solutions from the discipline specific knowledge gained in lectures and coursework, to address a real world engineering problem. 2. Undertake a project involving independent enquiry and investigation of a practical engineering problem, application or topic. 3. Identify, formulate, analyse, and solve an engineering problem. 4. Formulate a project outline, including the project goals and schedule to achieve the aims of the project. 5. Design a system, component or process to meet a specified engineering goal. 6. Analyse and interpret results from experiments conducted during the module in order to modify, improve or explain the functionality of the system, component or process being created. 7. Communicate effectively in technical and scientific writing, and present scientific/technical ideas concisely to a technical audience that may not be expert in the specific domain of the project. 8. Manage workflow and task scheduling within the constraints of the resources available to meet specific design goals and deadlines. 9. Work in a team as required, particularly with technical staff members and peers to achieve the project goals. 10. Use industry standard hardware and/or software tools and codes of practice for all aspects of design including analysis and presentation. 11. Examine and discuss the impact of the project on society, giving consideration to ethical norms and standards. This module sees students take responsibility for a project of significant scale, where they act on the basis of knowledge and understanding acquired over the course of their Engineering degree programme to date, and new knowledge they are motivated to acquire beyond the lecture room. They must think critically to identify creative solutions to problems encountered

[1] TEP Glossary

	over the course of their project, adapting their initial plans along the way, with substantive analysis and synthesis of the results of the project. The project will be presented both orally and in an engineering report, at a technical level appropriate for a graduate engineer. **Graduate Attributes: levels of attainment** To act responsibly - Attained To think independently - Attained To develop continuously - Attained To communicate effectively - Attained
Module Content	Engineering research is an essential component of industry driving the development of new products and processes. In an academic context, engineering research can lead to technologies with significant societal benefits. The aim of this module is to provide exposure to the concepts and processes of research in engineering to prepare students for conducting their first engineering research project in 5th year or the future. The taught element of the course is delivered via the EE4E3 Module which is directly incorporated into this EEU44E02 module for Semester 1. To achieve these aims the taught element of the module will include: • Project Planning • Planning a Project Report • Communication and Presenting • Professional Writing • Scientific Document Creation • Presenting Results • Coding/Batch jobs • Ethics and Security • Gender • R&D Experiences Individual Engineering Projects are conducted in Semester 2, and are allocated in the areas of research expertise and interest of members of the academic staff in the Department of Electronic and Electrical Engineering. Project assignments are made to students on the basis of the choice forms which should be completed and returned by the end of the first week of the Semester 1. The nature and content of the project is then discussed with the supervisor in the following weeks of the first semester. Students are expected to do sufficient background reading such they are ready to engage fully in the technical work of the project in Semester 2.

Teaching and Learning Methods	Students will attend all lectures associated with module EE4E3 in Semester 1. There are no formal timetabled hours in Semester 2, but students are expected to fully engage with their project and spend the time it takes to make reasonable progress and to keep in regular contact with their supervisors. It is recommended that students make a formal arrangement with their supervisors to meet on a weekly basis, preferably at a regular appointed time.

Assessment Details[2]
Please include the following:

- **Assessment Component**
- **Assessment description**
- **Learning Outcome(s) addressed**
- **% of total**
- **Assessment due date**

Assessment Component	Assessment Description	LO Addressed	% of total	Week due
4E3 engagement	Appointed in 4E3	7,8,2,11	2.5	S1 as per EE4E3
Project Plan	Project outline with plan	1,2,3,4,5,8	5	Start Week 2, Sem2
Presentation	Poster Presentation	2,5,6,7,11	12.5	Week 9, Sem 2
Final Report	Engineering report	All	80	Week 12, Sem 2

Reassessment Requirements	100% based on a final report with an optional interview should the primary supervisor request it.

Contact Hours and Indicative Student Workload[2]	
	Contact hours: 20 in Semester 1
	Independent Study (preparation for course and review of materials): 4 hrs/week in Semester 1 [48hrs] 12hrs/week in Semester 2 [144 hrs]
	Independent Study (preparation for assessment, incl. completion of assessment): 4hrs/week in Semester 1 [48 hrs] 12/hrs/week in Semester 2 [144 hrs] Note total 404 hours with 25% of load in Semester 1.

Recommended Reading List	"How to write a thesis" by Umberto Eco
Module Pre-requisite	
Module Co-requisite	
Module Website	

[2] TEP Guidelines on Workload and Assessment

Are other Schools/Departments involved in the delivery of this module? If yes, please provide details.	
Module Approval Date	
Approved by	Prof. Naomi Harte
Academic Start Year	September 2025
Academic Year of Date	2025/2026