Module Code	EEU44E04
Module Name	4E4 Trinity Industry Partnership Project
ECTS Weighting <sup>1</sup>	30 ECTS - Derogation
Semester taught	Semester 2
Module Coordinator/s	Declan O'Loughlin

Module Learning Outcomes with reference to the Graduate Attributes and how they are developed in discipline

The learning outcomes for the EPI module are focused on the implementation of technical knowledge in addressing engineering problems, communications, group work, professional and social ethics, sustainability, risk assessment and engineering design practice. The project work undertaken as part of the EPI is diverse. As a result, the Learning Agreement/Outcomes will vary, but on successful completion of the module, students will have achieved several learning outcomes from the following list and should:

- Be able to identify and use appropriate mathematical methods, numerical techniques and software tools for application to new and ill-defined engineering problems;
- Be able to integrate knowledge, handle complexity and formulate judgements with incomplete or limited information;
- Have the ability to redesign products, processes or systems in order to improve productivity, quality, safety and other desired needs;
- Have the ability to apply design methods, processes and techniques to unfamiliar, ill-defined problems, involving other disciplines;
- Be able to design using professional ethics according to codes of practice and industry standards; to identify limitations of codes of practice and the need for their application;
- Have the ability to investigate and define a need and identify constraints including health, safety and legal issues and the impact of engineering solutions in societal and environmental contexts;
  - Be able to make engineering judgements that take cognisance of the social, environmental, ethical, economic, financial, institutional and commercial considerations affecting the exercise of their engineering discipline;
- Have the ability to consult and work with experts in various fields, both within and outside of their own discipline, in the realisation of a product, system or procedure;
- Have knowledge and understanding of concepts from a range of areas outside engineering;
- Be able, via knowledge and understanding of group dynamics, to exercise leadership;

<sup>&</sup>lt;sup>1</sup> TEP Glossary

- Be able to select and apply appropriate communication tools and write technical papers and reports and give viva voce presentations;
- Be able to describe succinctly, the relevant advantages and disadvantages of various technologies to a lay audience, and to communicate effectively in public and to society at large.

## **Graduate Attributes: levels of attainment**

To act responsibly - Enhanced
To think independently - Enhanced
To develop continuously - Enhanced
To communicate effectively - Enhanced

## **Module Content**

The Engineering Project Internship (EPI) module is a practical internship in a professional engineering setting. This setting can be a company, a government institution, research centre, clinic, etc. as deemed appropriate. The School of Engineering has selected hosts for the EPI which are already in collaboration with School of Engineering academics or are forming new relationships of mutual benefit.

## **Teaching and Learning Methods**

The EPI gives the student the opportunity to translate engineering theory into practice in a professional engineering environment. A central requirement of the EPI is that it must be based around significant engineering research, design or development work. The EPI is principally assessed on the basis of defined engineering work. The technical activity should be related to both the student's engineering studies and to the host's activities, and it should constitute a significant body of engineering work at the appropriate level. It should involve tasks and methods that are more appropriately completed in a professional engineering environment and should, where possible, make use of human and technology resources provided by the host. It consolidates the student's prior learning and provides a context for later research studies. The student remains a full-time registered student at Trinity College Dublin during the EPI and this activity is therefore wholly distinct from any industrial interactions which may occur over vacation periods.

## Assessment Details<sup>2</sup> Please include the following:

- Assessment Component
- Assessment description

Assessment Component	Assessment Description	LO Addressed	% of total	Week due
Goals Report	Detailed listing of mutually agreed project goals signed off by host	All	10%	4 <sup>th</sup> Week

<sup>&</sup>lt;sup>2</sup> TEP Guidelines on Workload and Assessment

<ul><li>Learning Outcome(s) addressed</li></ul>	Midway Presentation	Presentation formatted progress report	All	30%	12 <sup>th</sup> Week
<ul> <li>% of total</li> <li>Assessment due date</li> </ul>	Final Report	Project Report submission setting out introduction to area, detailing context and justification for the project, background research, enumeration & justification of methods, work undertaken and verification/validation of chosen methodology, conclusions, lessons learned and proposals for future development	All	60%	16 <sup>th</sup> Week
Reassessment Requirements	Reassessment	is via resubmission			
Module Organisation	The EPI module ordinarily runs from early/mid January to end of July and must last for six months. The EPI accounts for half of the student effort in the fourth-year of their five-year MAI <sup>1</sup> studies. Students who take the EPI do not take any other modules in the second semester of their fourth year.				
Contact Hours and Indicative Student Workload <sup>2</sup>	Indicative Contact hours: Full time, Semester 2				
	Independent Study (preparation for course and review of materials):				
	-	Study (preparation for assert assessment):	essment, incl.		
Recommended Reading List					
Module Pre-requisite					
Module Co-requisite					
Module Website					

Are other Schools/Departments involved in the delivery of this module? If yes, please provide details.	No
Module Approval Date	
Approved by	Prof. Naomi Harte
Academic Start Year	September 2025
Academic Year of Date	2025/2026