Module Code	EEU44E04
Module Name	4E4 Trinity Industry Partnership Project
ECTS Weighting	30 ECTS - Derogation
Semester taught	Semester 2
Module Coordinator/s	
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;
- 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

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
Goals report	Detailed listing of mutually agreed project goals signed off by host	ALL	5%	24
Midway Poster Presentation	Poster Presentation formatted progress report	ALL	20%	33
Reflective Diary	Intern's personal log detailing tasks, activities and learning moments.	ALL	5%	45
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	70%	45

Reassessment Requirements	**No pathway currently exists for reassessment**

Module organisation	The EPI module ordinarily runs from early/mid January to end of July. The EPI accounts for half of the student effort in the fourth-year of their five-year MAI[1] studies. Students who take the EPI do not take any other modules in the second semester of their fourth year.
Recommended Reading List	
Module Pre-requisite	This is an optional module in the Senior Sophister (4th) year for students on the MAI track[1]. A minimum II.1 grade must be obtained in the student's first attempt at the Junior Sophister **annual examinations** to be eligible for participation in this module.
Implications	Participation in the EPI can limit MAI module choices for the fifth-year, due to the prerequisite requirements for some modules. Accordingly, it is essential to ensure that MAI students who go on Internship in their fourth year will be able to avail of a suitable menu of modules in their fifth-year. It will be allowable in some circumstances for fifth-year students to take up to 10 ECTS of appropriate fourth-year modules. These modules must be chosen to strengthen their chosen area of specialism and, where possible, also support their fifth-year project work. The choice of modules for the fifth-year for all students going on the EPI must be made with the agreement of the Year/Stream Coordinator(s), and the Head of Discipline.
Module Website	www.tcd.ie/Engineering/undergraduate/baiyear4/modules/4E04.pdf
Are other Schools/Departments involved in the delivery of this module? If yes, please provide details.	No
Module Approval Date	
Approved by	
Academic Start Year	
Academic Year of Date	