

Module specification

When printed this becomes an uncontrolled document. Please access the Module Directory for the most up to date version by clicking on the following link: [Module directory](#)

Module Code	ENG6E4
Module Title	Project
Level	6
Credit value	40
Faculty	FACE
HECoS Code	100184
Cost Code	GAME
Pre-requisite module	N/A

Programmes in which module to be offered

Programme title	Core/Optional/Standalone
BEng (Hons) Industrial Engineering (Mechanical)	Core
BEng (Hons) Industrial Engineering (Electrical)	
BEng (Hons) Industrial Engineering (Mechatronics)	
BEng (Hons) Mechanical Engineering with Manufacture	
BEng (Hons) Electrical Engineering with Manufacture	
BEng (Hons) Sustainable Energy Engineering	
BEng (Hons) Aerospace Engineering	
BEng (Hons) Mechanical Engineering	
BEng (Hons) Motorsport Engineering	
BEng (Hons) Renewable Energy Engineering	

Breakdown of module hours

Learning and teaching hours	6 hrs
Placement tutor support hours	0 hrs
Supervised learning hours e.g. practical classes, workshops	0 hrs
Project supervision hours	6 hrs
Active learning and teaching hours total	12 hrs
Placement hours	0 hrs
Guided independent study hours	388 hrs
Module duration (Total hours)	400 hrs

Module aims

This module enables students to demonstrate high-level technical competence through predominantly practical learning. Learners design and execute experiments or technical tasks that test and refine complex theories. The experience develops autonomy, creativity, and evaluative judgement aligned to graduate-level expectations and professional accreditation standards.

This module aims to enable students to apply and extend the knowledge acquired in taught modules through the completion of a professional engineering project. In doing so, it develops practical engineering skills, research capability, and industry-relevant experience, preparing students for progression into professional practice.

Module Learning Outcomes

At the end of this module, students will be able to:

1	Select and evaluate technical literature and other sources of information to address complex engineering problems (AHEP-4 C4).
2	Apply a risk management process to identify, evaluate, and mitigate risks associated with engineering projects, demonstrating awareness of uncertainty and its effects (AHEP-4 C9).
3	Select and apply appropriate materials, equipment, engineering technologies, and processes in project work, recognising their limitations (AHEP-4 C13).
4	Communicate effectively on complex engineering matters through written and visual formats, addressing both technical and non-technical audiences (AHEP-4 C17).

Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

Assessment 1: Dissertation/Project

The report assesses students' ability to undertake independent research, critically evaluate information, and apply engineering knowledge within a professional project context.

Assessment 2: Presentation

The presentation evaluates students' ability to communicate findings effectively to both technical and non-technical audiences.

Assessment number	Learning Outcomes to be met	Type of assessment	Duration / Word Count	Weighting (%)	Alternative assessment, if applicable
1	1-2	Dissertation/Project	10000	80	N/A
2	3-4	Presentation	N/A	20	N/A

Derogations

Credits shall be awarded by an Assessment Board for those modules in which a pass mark 40% has been achieved, with a minimum mark of 30% in each assessment element.

Learning and Teaching Strategies

Learning and teaching are dominated by laboratory engagement, where students apply and test advanced concepts through independent experimentation. Activities encourage problem-solving, innovation, and precision, supported by concise theoretical sessions and virtual study materials. Tutorials provide formative feedback and promote critical evaluation of results within a professional context.

Welsh Elements

This module will be delivered through the medium of English; however, students have the option to submit their assessments in the medium of Welsh. While this module is not currently offered fully through Welsh, Welsh language support and guidance are available, and some learning materials or tutorial discussions may incorporate Welsh elements where appropriate. To further promote bilingual learning, all students have the opportunity to take the 20-credit *Welsh for STEM* short course, designed to develop confidence and subject-specific language skills in both English and Welsh.

Indicative Syllabus Outline

Technical Literature Review and Evaluation: Development of skills in identifying, selecting, and critically evaluating academic, industrial, and technical sources to inform solutions to complex engineering problems.

Project Definition and Contextual Research: Application of structured approaches to define project scope and objectives, supported by the evaluation of relevant literature and data sources.

Risk Identification and Assessment: Application of structured methodologies to identify and evaluate risks associated with engineering projects, including technical, operational, and environmental uncertainties.

Risk Mitigation and Management Strategies: Development and application of appropriate strategies to mitigate identified risks, ensuring safe and effective project delivery under uncertain conditions.

Application of Engineering Technologies and Processes: Selection and application of suitable materials, equipment, and technologies within project work, ensuring alignment with engineering requirements and constraints.

Evaluation of Limitations and Constraints: Critical assessment of the limitations and capabilities of chosen technologies and processes, informing appropriate engineering decisions within the project context.

Technical Report Preparation: Development of clear, structured technical documentation to communicate complex engineering analysis, design decisions, and project outcomes.

Professional Presentation and Communication: Delivery of effective written and visual communication tailored to both technical and non-technical audiences, ensuring accessibility and clarity of engineering information.

Indicative Bibliography

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads:

Please refer to the information provided on Moodle as this will signpost you to the most appropriate sources of information and guidance for the project module.

Administrative Information

For office use only	
Initial approval date	June 2026
With effect from date	September 2026
Date and details of revision	
Version number	1