Module Specification

Project Management for Engineers

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Contents

Part 1: Information

Module title: Project Management for Engineers

Module code: UFMEB5-15-2

Level: Level 5

For implementation from: 2026-27

UWE credit rating: 15

ECTS credit rating: 7.5

College: College of Arts, Technology and Environment

School: CATE School of Engineering

Partner institutions: None

Field: Engineering, Design and Mathematics

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: This module focuses on the detailed project planning phase of the project life cycle, providing students with essential tools to manage engineering projects within a business context. It integrates project management methodologies, commercial considerations and research principles, preparing students to design sustainable business models and develop well-structured engineering research proposals.

Features: Not applicable

Educational aims: By the end of this module, students will have gained the skills necessary to:

Apply project management principles to real-world engineering challenges.

Develop commercially viable and sustainable business models in an engineering context.

Formulate evidence-based, research-driven project proposals to support their final-year individual project.

Outline syllabus: <Part 1>
Project scope management, planning and scheduling
Procurement, resource and cost management
Stakeholder and communication management
Project risk management
Sustainability and ethical consideration in engineering projects
Project management in a business context

<Part 2>
Research process: theory and practical implications including action and case study research
Ethical considerations for engineers undertaking research
Risk assessment and management, planning and budgeting
Research proposal preparation
Features of qualitative and quantitative data
Data analysis and presentation

Part 3: Teaching and learning methods

Teaching and learning methods: One hour lecture per week delivered by the module team and guest speakers from industry, providing the students with a detailed process of project execution and practical knowledge of what it takes to

initiate and commercialise an innovative business idea.

Two hour tutorial per week that focuses on developing student's project management skills and entrepreneurial skills through team work and exploration of each of the topic areas covered during the lecture.

Project based learning is used to facilitate learning, and is a student-centred learning approach that mirrors the professional behaviour of an engineer and provides opportunity for students to work as a team, manage time and resources to deliver small projects within an individual discipline.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Apply knowledge of engineering project management principles in practical, real-world scenarios

MO2 Demonstrate a comprehensive understanding of the commercial context within engineering project to design a sustainable business model

MO3 Develop a coherent, literature based, evidenced and feasible project proposal that contains a clearly defined engineering research question that may be applicable to real world application or academic research.

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 54 hours

Face-to-face learning = 96 hours

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://rl.talis.com/3/uwe/lists/03297FC2-68FC-A8EE-B803-57CC91CB5A63.html?lang=en-GB&login=12AACE.html?lti1p3LaunchId=lti1p3_launch_67b88f541be848.86457724&lti1p3LinkType=deep_link&login=1

Part 4: Assessment

Assessment strategy: Assessment in this module consists of:

- a portfolio that consists of various tasks addressing the learning outcomes, including a presentation in the form of a "business pitch" and an individual engineering project proposal.

Formative assessment will be provided during the two-hour weekly tutorials to support students in preparing their project proposals.

Resit assessments will mirror the format of the first sit assessments, with potential adjustments to the scope and scale of engineering solutions or business ideas.

Assessment tasks:

Portfolio (First Sit)
Description: Portfolio
Weighting: 100 %
Final assessment: Yes
Group work: Yes
Learning outcomes tested: MO1, MO2, MO3

Portfolio (Resit)
Description: Portfolio
Weighting: 100 %
Final assessment: Yes
Group work: Yes
Learning outcomes tested: MO1, MO2, MO3

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Robotics [Frenchay] BEng (Hons) 2025-26

Electrical and Electronic Engineering [Frenchay] BEng (Hons) 2025-26

Electrical and Electronic Engineering {Foundation} [Frenchay] BEng (Hons) 2024-25

Robotics {Foundation} [Frenchay] BEng (Hons) 2024-25