Module Specification

Individual Project MEng B

Version: 2025-26, v5.0, Approved

Contents

Part 1: Information

Module title: Individual Project MEng B

Module code: UFMERY-30-M

Level: Level 7

For implementation from: 2025-26

UWE credit rating: 30

ECTS credit rating: 15

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: Engineering Project 2025-26, Individual Project MEng A 2025-26

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: It is expected that students will further develop their skills and competencies as their project activities expand, from specialist technical skills through to transferable skills.

Features: Not applicable

Educational aims: It is expected that students will further develop their skills and competencies as their project activities expand, from specialist technical skills

through to transferable skills. These will include the ability to:

Project manage their activities, relating the original project aims and objectives to their interim (UFMFY8-30-3 or UFMFX8-30-3) outcomes, recognising and discussing how this influences the expanded project activities.

Review and, if necessary, conduct further risk assessment to ensure all issues, including Health and Safety are recognised and mitigated.

Review and discuss the expanded project's ethical, economic, legal, social and environmental issues.

Extend and deepen their review of appropriate background material and related academic literature. National codes of practice and policy should also be considered, as relevant.

Extend and explain their research methodology, relating their background research, previous project outcomes and recommendations to the project application. Use this methodology to rigorously analyse and critically evaluate the extended project and its process. Validate the results achieved, derive explanations for any deviations from expectation and discuss the implications of these results.

Further enhance their written and verbal communication skills to disseminate the project outcomes.

Reflect upon activities undertaken and develop conclusions about the work done and its impact. Identify recommendations for further activity. This "MEng B" module's activity culminates in a thorough review and reflection of the project and its implications for impact and further work.

Outline syllabus: This project builds upon the Level 6 project (UFMFY8-30-3 or UFMFX8-30-3) in the following respects:

The Level 6 project report provides the basis of the project, and its continuation and

expansion into Level 7.

A discussion is required in the introduction to the project, explaining how it is being developed and why.

Having already completed a research project at Level 6, students are expected to build on this experience and demonstrate a deep understanding, creativity, and rigour in their approach to and evaluation of the project.

Students will critically evaluate the project methodology and results obtained.

Students are expected to reflect upon their project activities, identifying good practice and areas for improvement.

As with the Level 6 module, learning is predominantly through independent, self-directed study, with the support of a project supervisor and the module leader.

Part 3: Teaching and learning methods

Teaching and learning methods: This is a self-directed, self-managed individual project module. Each student is assigned a project supervisor. The role of the supervisor is to provide guidance and to monitor progress. Throughout the project, the student will meet their supervisor as required.

As the project is an independent activity, all the supporting material to support the project process will be provided via Blackboard. It is the students' responsibility to regularly review this material to ensure compliance with the process.

Students may develop further their project in the previous Individual Project module in Level 6 or develop a new project idea.

During the project selection and identification stage, students will work closely with their supervisor to formulate a research proposal. This will define the scope of the

investigations and experimental studies to be undertaken. It will also establish the resources necessary for project completion. Additionally, the wider considerations about the project will be identified and managed accordingly.

Students are encouraged to develop their dissertations as the project work proceeds, to ensure all relevant aspects of the project are captured. Guidance will be given on the writing and composition of the dissertation.

Scheduled contact:

One-to-one: where the student and their supervisor meet, or, where a group of students working on related project topic meet together with their supervisor.

Self-study:

Students are expected to identify and make use of appropriate resources, including other staff, and students, where appropriate. Students are expected to engage with the study and the evaluation of their individual project investigation.

Review meetings will be held on a regular basis between supervisor and student, at which project planning and progress will be discussed. The meeting will enable the supervisor to give feedback to the student, concerning the work undertaken and the progress achieved. Such meetings will take place typically every two/three weeks during the teaching year. It will be the responsibility of the student to arrange and record such meetings.

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

MO1 PROJECT PLANNING MANAGEMENT AND IMPACTS
Demonstrate the management of a self-directed original research project, cogent to their degree, reflecting a substantial piece of work. Reflect on the impacts of the project in relation to security, ethics and sustainability.

MO2 PROJECT EXECUTION
Evaluate and critique research methodologies and identify an appropriate methodology to execute an in-depth, systematic study involving technical work.

MO3 PROJECT EVALUATION

Synthesise information, critically evaluate it and develop justified conclusions and recommendations.

MO4 PROJECT COMMUNICATION

Effectively communicate to a professional standard, technical understanding and recommendations achieved from the research investigation to a technical audience.

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 286 hours

Face-to-face learning = 14 hours

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ufmery-30-m.html

Part 4: Assessment

Assessment strategy: The assessment for this module is as follows:

Progression Portfolio:
(Progress Review = meeting with the supervisor where evidence is presented)

Progress Review 1: Evidence of meeting with supervisor (and technician) to generate initial project concept including aims, objectives, scopes, research questions, ethics.

Progress Review 2: Evidence of risk assessment, project management, evaluation of methodology, references, and setting targets for the next progress review.

Progress Review 3: Evidence of work undertaken so far and addressing the targets set in the previous progress review.

Project Report / Dissertation

The report will:

Record the project and the related processes

Contain relevant background supporting evidence

Include a clear methodology, and suitable analysis and evaluation

Provide clear conclusions and recommendations for further work based on the project's outcomes

Guidelines will be provided to aid project assessment, and will cover all aspects of the project investigation and management as described.

Final Viva Presentation:
The student will be have a viva around their final report.

Resit is the same as the first sit.

Assessment tasks:

Portfolio (First Sit)
Description: Progression Portfolio
Weighting: 0 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1

Presentation (First Sit)
Description: Viva style - presentation or where appropriate a demonstration of the engineering work in practice.

Weighting: 50 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO2, MO3, MO4

Report (First Sit)

Description: Submission of a journal, conference, technical report or design summary

Weighting: 50 %

Final assessment: No

Group work: No

Learning outcomes tested: MO2, MO3, MO4

Portfolio (Resit)

Description: Progression Portfolio

Weighting: 0 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1

Presentation (Resit)

Description: Viva style - presentation or where appropriate a demonstration of the engineering work in practice.

Weighting: 50 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO2, MO3, MO4

Report (Resit)

Description: Submission of a journal, conference, technical report or design summary containing research activities.

Weighting: 50 %

Final assessment: No

Group work: No

Learning outcomes tested: MO2, MO3, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Aerospace Engineering [Sep][PT][Frenchay][8yrs] MEng 2019-20

Aerospace Engineering (Design) [Sep][PT][Frenchay][8yrs] MEng 2019-20

Aerospace Engineering (Manufacturing) [Sep][PT][Frenchay][8yrs] MEng 2019-20

Aerospace Engineering (Systems) [Sep][PT][Frenchay][8yrs] MEng 2019-20

Electronic Engineering [Sep][SW][Frenchay][5yrs] - Withdrawn MEng 2021-22

Automotive Engineering {Foundation} [Sep][SW][Frenchay][6yrs] - Withdrawn MEng 2020-21