STUDENT AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Information			
Module Title	Individual Project BEng		
Module Code	UFMFX8-30-3	Level	Level 6
For implementation from	2020-21		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Engineering, Design and Mathematics
Department	FET Dept of Engineering Design & Mathematics		
Module Type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co-requisites	None		
Module Entry Requirements	None		
PSRB Requirements	None		

Part 2: Description
Features: Module Entry requirements: 210 credits of which 90 must be at level 2 or above   **Educational Aims:** See Learning Outcomes   **Outline Syllabus:** The nature of the project will be dependent on the topic being investigated. The project is designed to provide an opportunity for students to undertake individual, self-directed work, in an area of their choice related to their award, and to further develop their engineering-based knowledge. The project may encompass any aspect of engineering, and may result from a student's industrial work, from personal interest and experience, or from the university.   Learning is predominantly through independent, self-directed study, with the support of a project supervisor and the module leader. It is expected that students will develop a range of skills as their project activities develop, from specialist technical skills through to transferable skills. These will include the ability to: Project manage their activities, from project selection, aims and objectives, through to identifying and discussing its outcomes and their dissemination.

Build awareness of health and safety issues relating to their project and any wider implications, ensuring a suitable risk assessment process is successfully undertaken.

Understand and assess the project's ethical, economic, legal, social and environmental issues.

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

Develop research methodology to relate their background research to the project application and use this methodology to analyse and evaluate the project and its process. Validate and explain the results achieved.

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

Discuss the activities undertaken and develop conclusions about the work done and its implications.Identify recommendations for further activity

Teaching and Learning Methods: Students will normally work independently with limited supervision. 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. Scheduled group workshops to cover generic skills are encouraged, along with collaboration between students working on related projects.

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.

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.

Group:
Where students are provided with generic study skills advice e.g. information literacy, laboratory awareness.

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.

Formal sessions are provided on health and safety and specific project management topics as and when required.

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.

Part 3: Assessment	
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Component A Assessed Progress Review

The student is required to present and answer questions that demonstrates their understanding of the research undertaken to date, how they have managed the research programme and developed professional competences. Feedback from the progress review will feed into the completion of the research project and the dissertation. (Achieving Learning Outcome 6)

Component B:
B1 Research Proposal

This document will:

Record the formal requirements of the project

Consider the ethical, economic, legal, social and environmental implications of the project

Identify the project management requirements, such as resources and risk considerations

Contain a project schedule, including relevant Literature Review / Background Research plan.

Be a maximum of 10 pages in length, including a Contact Register of 2 pages.

The aim of this element is to ensure the project is planned properly, has started and is progressing as expected, with the potential to achieve a suitable outcome for the module. (Achieving Learning Outcomes 1 and 2)

B2 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

Be a maximum of 12,000 words.

The aim of this element is to ensure the project is technically competent, properly managed and executed. Students are expected to use the dissertation to explain their project and its processes, and are marked on the dissertation – not the project itself. (Achieving Learning Outcomes 2 - 6)

Guidelines will be provided to aid project assessment, and will cover all aspects of the project investigation and management as described. Assessment will be by the project supervisor, the first marker, assisted by another academic, the second marker. Both markers will scrutinise the project, and arrive at individual marks. They will use these marks to derive a provisional dissertation mark. Marking Criteria: There will be a range of published criteria, focusing on two key aspects – the management of the project and the demonstration of technical competence.

Moderation: There will be moderation of a sample of dissertations to ensure consistency across the marking team.

First Sit Components	Final Assessment	Element weighting	Description

	Final Assessment	Element weighting	Description
Presentation - Component A	✓	25 %	Assessed Progress Review
Written Assignment - Component B		11 %	Research proposal
Report - Component B		64 %	Report (12000 words)
Resit Components	**Final Assessment**	**Element weighting**	**Description**
Presentation - Component A	✓	25 %	Poster and Presentation
Report - Component B		75 %	Report (12000 words)

Part 4: Teaching and Learning Methods	
Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes: **Module Learning Outcomes** / **Reference** Identify the main issues to be examined and the problems to be solved in the execution of an engineering-discipline-related technical project. — MO1 Undertake management of technical projects and select appropriate knowledge sources to guide project execution and fulfil the project aims. — MO2 Complete technical work, undertake design and specification of critical components so as to enable experiments to be undertaken with success. — MO3 Analyse and evaluate experimental and other data arising, to complete a critical appraisal of the technical work undertaken for the project and the overall management of the investigation — MO4 Make clear and well-argued and supported recommendations for the continuation of the further work and development of the project. — MO5 Effectively communicate, verbally and in written format, technical understanding and recommendations achieved from the research investigation. — MO6

Module Learning Outcomes	Reference
Identify the main issues to be examined and the problems to be solved in the execution of an engineering-discipline-related technical project.	MO1
Undertake management of technical projects and select appropriate knowledge sources to guide project execution and fulfil the project aims.	MO2
Complete technical work, undertake design and specification of critical components so as to enable experiments to be undertaken with success.	MO3
Analyse and evaluate experimental and other data arising, to complete a critical appraisal of the technical work undertaken for the project and the overall management of the investigation	MO4
Make clear and well-argued and supported recommendations for the continuation of the further work and development of the project.	MO5
Effectively communicate, verbally and in written format, technical understanding and recommendations achieved from the research investigation.	MO6

Contact Hours	**Independent Study Hours:**	
	Independent study/self-guided study	286
	Total Independent Study Hours:	286
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	14
	Total Scheduled Learning and Teaching Hours:	14
	Hours to be allocated	300

	Allocated Hours	300
Reading List	*The reading list for this module can be accessed via the following link:* https://uwe.rl.talis.com/modules/ufmfx8-30-3.html	

Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Mechanical Engineering (Mechatronics) {Top-Up} [Feb][FT][AustonSriLanka][1yr] BEng (Hons) 2020-21

Mechanical Engineering (Mechatronics) {Top-Up} [Feb][FT][AustonSingapore][1yr] BEng (Hons) 2020-21

Mechanical Engineering (Mechatronics) {Top-Up} [May][FT][AustonSingapore][1yr] BEng (Hons) 2020-21

Mechanical Engineering (Mechatronics) {Top-Up} [Sep][FT][AustonSingapore][1yr] BEng (Hons) 2020-21

Mechanical Engineering (Mechatronics) {Top-Up} [Sep][FT][AustonSriLanka][1yr] BEng (Hons) 2020-21

Mechanical Engineering (Mechatronics) {Top-Up} [May][FT][AustonSriLanka][1yr] BEng (Hons) 2020-21

Electronic and Computer Engineering {Top Up} [Aug][PT][SHAPE][2yrs] BEng (Hons) 2019-20

Electrical and Electronic Engineering {Top-Up} [May][PT][AustonSriLanka][1.3yrs] BEng (Hons) 2019-20

Electrical and Electronic Engineering {Top-Up} [Feb][PT][AustonSriLanka][1.3yrs] BEng (Hons) 2019-20

Electrical and Electronic Engineering {Top-Up} [Oct][PT][AustonSriLanka][1.3yrs] BEng (Hons) 2019-20

Electrical and Electronic Engineering {Top-Up} [May][PT][AustonSingapore][1.3yrs] BEng (Hons) 2019-20

Electrical and Electronic Engineering {Top-Up} [Feb][PT][AustonSingapore][1.3yrs] BEng (Hons) 2019-20

Electrical and Electronic Engineering {Top-Up} [Oct][PT][AustonSingapore][1.3yrs] BEng (Hons) 2019-20

Electronic Engineering {Apprenticeship} {Top-Up} [Sep][PT][Frenchay][2yrs] BEng (Hons) 2019-20

Mechanical Engineering (Mechatronics) {Top-Up} [Sep][PT][AustonSingapore][2yrs] BEng (Hons) 2019-20

Mechanical Engineering (Mechatronics) {Top-Up} [Feb][PT][AustonSingapore][2yrs] BEng (Hons) 2019-20

Mechanical Engineering (Mechatronics) {Top-Up} [May][PT][AustonSingapore][2yrs] BEng (Hons) 2019-20

Mechanical Engineering (Mechatronics) {Top-Up} [Sep][PT][AustonSriLanka][2yrs] BEng (Hons) 2019-20

Mechanical Engineering (Mechatronics) {Top-Up} [Feb][PT][AustonSriLanka][2yrs] BEng (Hons) 2019-20

Mechanical Engineering (Mechatronics) {Top-Up} [May][PT][AustonSriLanka][2yrs] BEng (Hons) 2019-20

Engineering {Top-Up}[Sep][PT][Frenchay][2yrs] BSc (Hons) 2019-20

Electronic and Computer Engineering [Sep][FT][Frenchay][3yrs] BEng (Hons) 2018-19

Engineering [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19

Aerospace Engineering with Pilot Studies [Sep][FT][Frenchay][3yrs] BEng (Hons) 2018-19

Automotive Engineering [Sep][FT][Frenchay][3yrs] BEng (Hons) 2018-19

Mechanical Engineering [Sep][FT][Frenchay][3yrs] BEng 2018-19

Electronic and Computer Engineering [Sep][SW][Frenchay][4yrs] BEng (Hons) 2018-19

Mechanical Engineering [Sep][FT][Frenchay][4yrs] MEng 2018-19