



MODULE SPECIFICATION

Part 1: Information			
Module Title	Nuclear Apprenticeship Project		
Module Code	UFMFXL-40-3	Level	Level 6
For implementation from	2019-20		
UWE Credit Rating	40	ECTS Credit Rating	20
Faculty	Faculty of Environment & Technology	Field	Engineering, Design and Mathematics
Department	FET Dept of Engin Design & Mathematics		
Module type:	Project		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Overview: The 40 credit project module forms an essential element of the degree apprenticeship standard for the Nuclear Scientist / Engineer.</p> <p>Educational Aims: This module provides an opportunity for students to undertake individual, self-directed work, in an area of their choice related to their award, and to further their other engineering-based knowledge and project management skills.</p> <p>Outline Syllabus: 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:</p> <p>Project manage their activities, from project selection, aims and objectives, through to identifying and discussing its outcomes and their dissemination.</p> <p>Build awareness of health and safety issues relating to their project and any wider implications, ensuring a suitable risk assessment process is successfully undertaken.</p> <p>Understand and assess the project's ethical, economic, legal, social and environmental issues.</p> <p>Review appropriate background material and related academic literature. National codes of</p>

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practice and policy should also be considered, as relevant.

Develop research methodology to relate their background research to the project application.

Utilise this methodology to analyse and evaluate the project and its process.

Enhance their written and verbal communication skills to ensure all involved in the project are able to perform as expected. These skills will also be required in the dissemination of the project outcomes.

Verify the results achieved and derive explanations for any deviations from expectation.

Discuss the activities undertaken and develop conclusions about the work done and its implications.

Identify recommendations for further activity.

Teaching and Learning Methods: Learning is predominantly through independent, self-directed study, with the support of a project supervisor and the module leader.

The project may encompass any aspect of engineering applied to the nuclear field and will arise from a student's industrial work in consultation with their manager.

The nature of the project will be dependent on the topic being investigated.

Part 3: Assessment

The assessment of the project will consist of two elements; an initial research proposal and a final project report.

A1 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.

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.

A2 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 15,000 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.

A3 Presentation and oral examination

This module is delivered as part of the level 6 degree apprenticeship standard Nuclear Engineer which requires the 40 credit project to contain a 30 minute presentation and oral examination as part of the assessment.

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

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management as described.

Marking Criteria: Marking criteria will be published, focusing on two key aspects, the management of the project and the demonstration of technical competence.

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component A		20 %	Research proposal
Report - Component A		60 %	Report
Presentation - Component A	✓	20 %	Presentation and individual questioning
Resit Components	Final Assessment	Element weighting	Description
Report - Component A		80 %	Report
Presentation - Component A	✓	20 %	Presentation and individual questioning

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, well-argued and supported recommendations for further work and development based on the outcomes of the project	MO5
	Effectively communicate in written format: technical understanding, implementation of methodology, analytical ability, and identification of recommendations resulting from the research investigation	MO6
Contact Hours	Independent Study Hours:	
	Independent study/self-guided study	365
	Total Independent Study Hours:	365
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	35

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	Total Scheduled Learning and Teaching Hours:	35
	Hours to be allocated	400
	Allocated Hours	400
Reading List	<i>The reading list for this module can be accessed via the following link:</i> https://uwe.rl.talis.com/index.html	

Part 5: Contributes Towards

This module contributes towards the following programmes of study: