

Module Specification

Professionalism for Engineering Apprentices

Version: 2029-30, v2.0, 07 Apr 2025

Contents

| Module Specification | 1 |
|---------------------------------------|---|
| Part 1: Information | 2 |
| Part 2: Description | 2 |
| Part 3: Teaching and learning methods | 4 |
| Part 4: Assessment | 5 |
| Part 5: Contributes towards | 7 |

Part 1: Information

Module title: Professionalism for Engineering Apprentices

Module code: UFMEAR-15-3

Level: Level 6

For implementation from: 2029-30

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: Engineering Research 2028-29, Engineering Research and

Collaborative Project 2028-29

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: This module develops the concept of the "Professional Engineer", its meaning for your apprenticeship and how this impacts your career.

You will study current literature on the role of the engineer in creating a sustainable future for business and society. You will understand the skills required to operate within a modern engineering environment and understand where future opportunities

Student and Academic Services

Module Specification

lie as you think about your future career.

For your personal development you will be able to identify personal goals, review what evidence you have so far in your apprenticeship portfolio to demonstrate your professionalism and how this can be used to develop an initial career plan. This will feed into the development of your Project Proposal required for your End Point

Assessment.

Your portfolio will record your professional development, enabling you to demonstrate evidence for, discuss and reflect upon your strengths and areas for improvement. It will demonstrate how your learning relates to your Apprenticeship Standard's Knowledge, Skills and Behaviours and the Engineering Council's UK-SPEC for Engineers, and you will develop a Gap Analysis, with related actions to

Your output will be:

close these gaps.

- A Reflective report containing the project proposal for your End Point Assessment

Project.

- A portfolio designed to support your Apprenticeship Standard's End Point

Assessment, specifically the Professional Discussion.

Pre-requisites:

Students on BEng (Hons) Aeronautical Engineering (Degree Apprenticeship) (UCW) and BEng (Hons) Aerospace Engineering (Degree Apprenticeship) (UWE) must take

UFME78-30-2 Engineering Research and Collaborative Project.

Or

Students on BEng (Hons) Civil Engineering (Degree Apprenticeship) (UWE) must take UFMFRS-15-2 Engineering Research

Features: Not applicable

Educational aims: The aim of this module is develop a sound basis for understanding the role of the engineer and the professional engineering working environment. It will provide you with an opportunity to collate and justify the evidence from your Apprenticeship in support of your project proposal to pass the Gateway into your End Point Assessment.

Outline syllabus: Outline syllabus:

The professional engineering environment

Human factors, ethics and behaviours

Quality assurance and improvement

Safety management

Personal skills analysis and reflective practice

Equality and diversity, the inclusive workplace

Career planning and Continuing Professional Development

Emerging issues for engineering and sustainability

Part 3: Teaching and learning methods

Teaching and learning methods: The module involves a significant amount of self directed, self managed learning as each apprentice researches and identifies issues relevant to their End Point Assessment and future professional development.

This learning will be facilitated with a series of lectures and tutorials including workshops to enable group engagement, discussion and reflection. Formative opportunities will be provided to prepare for the EPA Professional Discussion.

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

MO1 Critically examine industry professional competences, such as UK-SPEC for Engineers and Apprenticeship KSBs, to develop a plan for your own professional development

MO2 Demonstrate ethical and safe professional behaviour in practice

MO3 Show a detailed knowledge and understanding of the importance of effective management in an operational environment, including tools and

Student and Academic Services

Module Specification

techniques used to plan and improve processes, in preparation for the EPA

process

MO4 Reflect upon the importance of people and behaviours in the engineering

process and the related impact of sustainable engineering in society in the

context of your own development

MO5 Discuss and critically appraise relevant literature about the impact of

engineering in society, in terms of the UN Sustainable Development Goals

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 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/E4117E90-

A5ED-8A18-1A38-0BC7F556B75D.html?lang=en-GB&login=1

Part 4: Assessment

Assessment strategy: The assessment is designed to help you understand your

current expertise and potential, and also the step change you will face as a graduate

engineer. You will discuss and reflect upon what it means to be an Professional

Engineer (this needs to be underpinned by current thinking and literature), using the

concepts proved in the module to help you.

The portfolio you develop will enable you to develop a structure to your career

planning. The module provides you with an opportunity to demonstrate and so

provide evidence for your engineering competency, and requires your personal

reflection on what you have learned. The assessment is in two parts, both of which

need to be completed:

Task 1: Written Assignment (25% of final module mark)

Module Specification

Student and Academic Services

An individual reflective report (1500 words) about the Apprenticeship to date and

how you have used it to develop your End Point Assessment project proposal

(Proposal Template provided).

Task 2: Portfolio (75% of final module mark)

The Apprenticeship portfolio is developed to critically evaluate your Apprenticeship

to date, in terms of the core requirements of the Apprenticeship Standard, how its

requirements (Knowledge, Skills and Behaviours) have been achieved, and what

you have learned from the process. This will include a Career Plan based on

relevant criteria such as the Apprenticeship KSBs and the UK-SPEC for Engineers

Incorporated Engineer (IEng) Skills and Competency Matrix to demonstrate current

learning and experience, plus identifying potential actions for future development.

The resit assessment strategy is the same as the first sit

Assessment tasks:

Written Assignment (First Sit)

Description: Reflection on Apprenticeship leading to Project Proposal for the End

Point Assessment activity

Weighting: 25 %

Final assessment: No

Group work: No

Learning outcomes tested:

Portfolio (First Sit)

Description: Portfolio Development demonstrating apprenticeship activities meet the

KSBs for the EPA Professional Discussion

Weighting: 75 %

Final assessment: Yes

Group work: No

Learning outcomes tested:

Written Assignment (Resit)

Description: Reflection on Apprenticeship leading to Project Proposal for the End

Point Assessment activity

Weighting: 25 %

Final assessment: No

Group work: No

Learning outcomes tested:

Portfolio (Resit)

Description: Portfolio Development demonstrating apprenticeship activities meet the

KSBs for the EPA Professional Discussion

Weighting: 75 %

Final assessment: Yes

Group work: No

Learning outcomes tested:

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Civil Engineering (Apprenticeship-UWE) [Frenchay] BEng (Hons) 2025-26

Aeronautical Engineering (Apprenticeship-UCW) [UCW] BEng (Hons) 2026-27

Aerospace Engineering {Apprenticeship-UWE} [UCW] BEng (Hons) 2026-27