

Module Specification

Professionalism for Engineering Apprentices

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Part 1: Information

Module title: Professionalism for Engineering Apprentices

Module code: UFMEAR-15-3

Level: Level 6

For implementation from: 2027-28

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 and Collaborative Project 2026-27

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 lie as you think about your future career.

Page 2 of 7 19 August 2024 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 close these gaps.

Your output will be:

- 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.

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

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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 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

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Total = 0

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link <u>https://uwe.rl.talis.com/lists/E4117E90-A5ED-8A18-1A38-0BC7F556B75D/dashboard.html</u>

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) 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

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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: MO3

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: MO1, MO2, MO4, MO5

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: MO3

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: MO1, MO2, MO4, MO5

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Aerospace Engineering {Apprenticeship-UWE} [UCW] BEng (Hons) 2024-25

Aeronautical Engineering {Apprenticeship-UCW}[UCW] BEng (Hons) 2024-25