University of the Built Environment
EST. 1919

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Professional Practice, Regulation and Industry Trends

Module Descriptor

Module Code:	BSE4PPR
Version:	V1.00
Status:	Final
Date:	25/03/2026

Summary Module Details

Module details

Module Title: Professional Practice, Regulation and Industry Trends

Module Leader: Dr Jackie Portman

Module Mode: Supported online learning

Semester: Autumn (UK) and Spring (UK)

Level: 4

Credits: 20 Hours

Learning Hours: 200

Contact & Study Hours

Directed Study Time: 90 hrs (45%)

Self-directed Study Time: 50 hrs (25%)

Assessment Study Time: 60 hrs (30%)

Assessment Type

Coursework: 80%

Computer Marked Assessment: 20%

Module Summary

This module supports students in developing professional awareness, regulatory understanding, and readiness for industry challenges. It introduces the role of engineers in multidisciplinary teams, the legal and ethical standards of professional practice, and current trends such as digitalisation, smart buildings, and decarbonisation. Health and safety, equality, and inclusion are explored alongside preparation for professional registration and the End Point Assessment process. While not heavily maths-focused, this module reinforces numeracy by supporting the interpretation of data, performance metrics, and regulatory thresholds.

Taken on which Programmes

CertHE Building Services Engineering **(C)**

Core (C) or Elective (E)

Module Aims

This module aims to:

- Develop students' awareness of professional roles, responsibilities, and ethical standards in building services engineering.
- Explore the function of engineers within multidisciplinary teams and the importance of collaboration in industry contexts.
- Provide understanding of regulatory frameworks, health and safety requirements, and principles of equality, diversity, and inclusion.
- Introduce current and emerging industry trends such as digitalisation, smart buildings, and decarbonisation, and their implications for practice.
- Support preparation for professional registration and the End Point Assessment process, reinforcing numeracy through data interpretation and performance analysis.

Module Learning Outcomes

LO1 Describe how health and safety legislation, ethical conduct, and sustainability principles shape engineering practice.

LO2 Explain the roles, responsibilities, and professional standards expected of building services engineers.

LO3 Demonstrate professional behaviours, communication, and self-management appropriate to Level 4 engineering practice.

LO4 Interpret and apply emerging trends in digitalisation, smart buildings, and net zero design, explaining how these developments may influence professional roles and practices.

Indicative Module Content

Module topics

Professional Roles, Ethics, and Teamworking

The module begins by exploring the role of engineers in multidisciplinary teams, including professional responsibilities, codes of conduct, and ethical decision-making. Students reflect on how collaboration, communication, and leadership underpin effective project delivery.

Regulation, Health, Safety, and Inclusion

This theme examines the regulatory environment shaping building services practice, including legal frameworks, health and safety requirements, and the importance of equality, diversity, and inclusion in engineering. Students develop awareness of how regulation and inclusive practice promote safe, fair, and sustainable outcomes.

Industry Trends and Future Challenges

Attention turns to current and emerging trends such as digitalisation, smart buildings, and decarbonisation. Students analyse how these developments are reshaping building services engineering and consider the implications for their future professional practice.

Professional Development and Registration

A key requirement for all engineers at any level of practice or experience is the need to maintain a record of continuing professional development (CPD). Students are presented with exemplars of various CPD learning, as well as the means to prepare for both End Point Assessment on completion of the Cert HE, and the requirements of Engineering Council for Engineering Technician registration.

Overview of Assessment

Each module follows a progressive structure of **two summative assessments** designed to build confidence, competence and professional judgement.

Assessment 1 is a computer-marked assessment (CMA) that provides early feedback and supports consolidation of core knowledge and principles. Positioned mid-module, it acts as both a confidence booster and a diagnostic opportunity to identify areas requiring further support, ensuring students are well prepared for the final assessment.

Assessment 2 is an integrated applied task that develops professional competence and judgement through two complementary components.

Part 1 – Developing Professional Judgement
Students interpret and communicate technical information using provided drawings, schedules and structured templates. They analyse well-defined engineering scenarios and present clear, concise technical responses. At this level, no original design production is required; evidence is demonstrated through mark-ups, brief technical commentary and completion of pro-forma documentation.

Part 2 – Applied Professional Output and Reflection
Students produce applied outputs in authentic industry formats (e.g., technical specifications, compliance notes, risk assessments or structured reports). This component aligns with Senior Technician practice and End Point Assessment expectations, requiring clear, usable professional documentation suitable for real project contexts. A structured reflective element supports the development of professional judgement and readiness for progression.

Module learning outcomes	Assessment	Word count or equivalent	Weighting
LO1 & LO2	**Assessment 1** CMA	600 words equivalent	20%
LO1, LO2, LO3 & LO4	**Assessment 2** Coursework	2,400 words equivalent	80%

Module Pass Mark (as a weighted average of all assessments): 40%

Students will also be offered optional pre-course reading and self-assessment activities to refresh basic technical and mathematical skills before starting the module.

Students are encouraged to complete optional pre-course reading and diagnostic quizzes to familiarise themselves with key environmental and scientific principles prior to engaging with the module content.

Key Module Learning Resources

Core Sources and Texts

The core reading resources within each module will be provided via the specific Virtual Learning Environment (VLE) module pages and within the e-Library. Additional reference material and supplementary resources to support your studies are available through the University e-Library.

Module tools

Students will have access to study materials, dedicated academic support, student forums, and learning activities via an online learning platform (VLE).

The module page on the VLE is broken down into structured study weeks to help students plan their time, with each week containing a mixture of reading, case studies, videos/recordings and interactive activities to go through. Online webinars/seminars led by the Module Leader can be attended in real time and provide opportunities to consolidate knowledge, ask questions, discuss topics and work through learning activities together. These sessions are recorded to support students who cannot attend and to enable students to recap the session and work through it at their own pace. Module forums on the VLE provide further opportunities to discuss topics with other students, complete collaborative work and get extra help from the module team.

Professional online resources

The e-Library provides access to trusted, quality online resources, selected by subject specialists, to support students' study. This includes journals, industry publications, magazines, academic books and a dissertation/work-based library. For a list of the key industry specific and education resources available please visit the VLE e-Library.

Other relevant resources

Access is also provided to further information sources that include the British Library and Open University UK catalogues, as well as providing a monthly current awareness service entitled, ***Knowledge Foundations*** - a compendium of news, research and resources relating to the educational sector and the Built Environment.

The module resource list is available on the module VLE page and is updated regularly to ensure materials are relevant and current.