

This table indicates the modules included in the academic programme for this apprenticeship and the structure which they follow.

Should you require further information about the modules, please contact [admissions@ucem.ac.uk](mailto:admissions@ucem.ac.uk)

Duration of apprenticeship: 54 months

This programme is subject to approval and as such availability and module details are subject to change.

**Please note:**

Students can either start in September or March. For the March module information sheet, please see our website.

Where considered necessary to do so at any stage, UCEM may seek to make variations to programme content, entry requirements and methods of delivery, and to discontinue, merge or combine programmes. This is subject to consultation with relevant students and other stakeholders, setting out the reasons for the proposed amendment(s), and compliance with the requirements of the UCEM Code of Practice on Programme Monitoring, Amendment, Review and Discontinuation. Should such an eventuality occur during the admissions and registration process, applicants will be informed immediately of any change and the alternative arrangements that have been put in place.

Yr	March Semester	September Semester
1	Financial and Resource Management (20 Credits) Building, Environment, Technology & Simple Construction (20 Credits)	Introduction to the Built Environment (20 credits) Digital Technologies (20 credits)
2	Environmental Science (20 credits) Construction Technology 2 (20 credits)	Design and Structures (20 credits) Law for the Built Environment (20 credits)
3	Integrated Project 1 (20 credits) Integrated Project 2 (20 credits)	Building Control (20 Credits) Planning & Conservation (20 Credits)
4	Sustainable Management of Property (20 credits) Public Safety in Buildings (20 credits)	Building Pathology (20 credits) Fire Safety (20 credits)
	Case Study Project (20 Credits)	
5	End Point Assessment (20 Credits) 6 months	

■ Core Modules Standard route (part-time)

## Year 1

### Financial and Resource Management (core)

#### Aims

This module explains how managers within organisations in the construction and built environment sectors achieve organisational aims by using financial and other resources. People management does feature in this module but the spotlight is on how managers may use non-human resources in the pursuit of corporate goals. The module covers the role of change throughout the organisation as a central theme, especially in the sense of changing techniques and organisational objectives. Internal financial control and external financial reporting are distinguished from each other and the essentials of capital investment appraisal and financial decision making are explored.

#### Assessment

	Weighting
Assessment 1: Coursework	40%
Assessment 2: Coursework	60%
Pass mark: 40%	

## Building, Environment, Technology & Simple Construction (core)

### Aims

This module provides an introduction to building, environment and technology based on simple construction, establishing a foundation of knowledge and understanding to be developed in later modules. It develops students' communication skills, enabling them to describe simple construction in a professional manner.

Simple building examples are included, such as traditional masonry construction and roof construction typical in buildings of up to three storeys. Perspectives such as sustainability are considered.

### Assessment

	Weighting
Assessment 1: Coursework	40%
Assessment 2: Coursework	60%
	Pass mark: 40%

The assessment methods for the following modules, which will be delivered from October 2020, are currently in design and will be confirmed closer to the time. The assessments will consist of a variety of methods including:

- assessed coursework (such as essays, reports, portfolios, reflections, problem or short questions or video presentations)
- computer marked assessments
- project submissions

## Introduction to the Built Environment (core)

### Aims

This module covers the core skills needed to succeed when studying in Higher Education, and when progressing toward accreditation with a Professional, Statutory and Regulatory Body (PSRB).

This module provides an introduction to the different roles within the surveying, real estate and architectural technology professions. The main emphasis of the learning focuses on the student's ability to communicate information in clear and concise terms.

## Digital Technologies (core)

### Aims

The Digital Technologies module takes the R.A.T. model (Replacement, Amplification, Transformation) (Hughes, 2005) and applies it to the use of technology specific to surveying, construction management and architectural technology professions. This enables the student to begin defining what role technology plays in their studies and in the workplace, and to evaluate the worth of each piece for that digital world.

## Year 2

## Design and Structures (core)

### Aims

This module covers key aspects of the theory and practice of design for buildings and building structures. It applies building technology theory and practice to straightforward design situations. The main study topics include the nature and relevance of design, design parameters, information and data, site analysis, spatial considerations, technology of fabric and services, building aesthetics. In addition, structural elements of design are introduced, looking at the theory and principles of structural calculation, and the requirements for building approval.

## Law for the Built Environment (core)

### Aims

This module enables the student to develop a basic understanding of aspects of the law in as much as they relate to the property and construction sectors in England and Wales as well as in Scotland. This will include an understanding of terminology used and the relevant principles of tort (delict in Scotland) and contract law. This module provides the underpinning legal knowledge for further legal studies later in the programme.

## Environmental Science (core)

### Aims

Environmental Science can cover many academic subjects related to the study of the environment: this module focuses on the understanding of how a building is affected both by its environment and its occupants, and vice versa: what effect that building has on the environment and people living in and around it. The relationship is a complex one, which is addressed here by using 'human comfort' as the overarching theme, and breaking that down into individual factors of heat, air, moisture, sound and light. These studies are designed to give some insight into the interaction between people, policies and perceptions regarding the natural and built environments.

## Construction Technology 2 (core)

### Aims

This module covers the construction technology and environmental control of long span and high rise framed structures. It aims to enable the student to respond effectively and professionally to the following series of questions:

- What is the purpose of a building?
- What statutory & voluntary regulation applies?
- What are appropriate building performance criteria?
- How is the building constructed?
- Why is it constructed that way?

## Year 3

### Integrated Project 1 (core)

### Aims

This module enables students to consolidate their knowledge and skills gained from previous studies, and to work collaboratively in multi-disciplinary groups, within a project scenario. The scenario will focus on preparation of a feasibility study for a client which provides reasoned advice on the potential for reconstruction or adaption of an existing commercial or industrial property for a new use. It provides the context for the further development of the study into Integrated Project 2. Whilst Building Control, Building Surveying and Architectural Design Technology students will have studied many of the same modules in their respective programmes, the scenario presents opportunities to demonstrate how each discipline can contribute to different elements of a feasibility study and for students to appreciate the strengths of each other's disciplines. Critically, this module provides an opportunity for elements of collaboration and personal reflection.

## Integrated Project 2 (core)

### Aims

This module enables students to consolidate their knowledge and skills gained from the previous module, working collaboratively in multi-disciplinary groups, within a project scenario. The context of the project was set in the Integrated Project 1 module whereby students undertook due diligence work for a commercial or industrial building and provided feasibility advice to a client on the options available in terms of reconstruction or adaption of the property for a new use. This second stage of the project is to identify procedures required for the adaption and refurbishment of the building based on a client's brief and to produce a scheme design for this and other associated data and documentation. Whilst Building Control, Building Surveying and Architectural Design Technology students will have studied many of the same modules in their respective programmes, the scenario presents opportunities to demonstrate how each discipline can contribute to different elements of a scheme design and for students to appreciate the strengths of each other's disciplines.

## Building Control (core)

### Aims

This module introduces building control students to one of the core competencies within the Industry and a competency which is required for students to become members of the accrediting professional bodies. The module examines the requirements for site inspections of building work to ensure that the work carried out meets relevant performance standards. Students will examine the Building Act 1984 or relevant equivalent in the country the student is based, together with the regulations or guidance which stem from this. Students will apply the standards and regulations to different scenarios, consider the phases of compliance and examine the mechanisms for dealing with non-compliant work.

## Planning & Conservation (core)

### Aims

This module provides a brief introduction to the evolution of buildings from the 18th to the 20th century. It also provides a brief introduction to the UK planning system. It comprises the dating of buildings through the evolution of materials and architectural styles from the 18th to 20th century; planning policy and plan making; the regulations affecting development; contemporary planning issues. The overall emphasis is on a practical approach to the subject.

## Year 4

## Sustainable Management of Property (core)

### Aims

This module aims to provide students with an appreciation of the essential link between the management of property – in terms of both utility and investment – and the business objectives of the client organisation. It considers the broader context of property management, in relation to clients, sustainability, legislation and the lifecycle of property. It also examines the nature of data required for an asset management plan and the collection of this.

## Public Safety in Buildings (core)

### Aims

A core skill for building control surveyors is the ability to assess the use of a building or venue for public events to ensure the safety of those attending. This module looks at safety in buildings and venues such as sports grounds, licenced premises and concert venues. Students will examine the legislation and guidance around the safety of buildings and venues and explore the application of these in different scenarios. They will use knowledge and skills already gained in earlier modules relating to construction technology, law, building control and fire safety.

## Building Pathology (core)

### Aims

This module is concerned with the pathology of buildings. It will develop students' ability to effectively diagnose and evaluate a range of commonly encountered building defects through a process of inspection, testing, survey and analysis.

This module aims to:

- explain and analyse key mechanisms, symptoms and impacts of a range of common building defects;
- develop a critical, rational and well-informed approach to the diagnosis of a range of common building defects and their remediation;
- critically appraise issues relating to professional liability and defects analysis;
- develop critical thinking and excellence in communication skills related to the reporting of building defects and their remediation.

## Fire Safety (core)

### Aims

Fire safety is a core competency within the Industry and one which is essential for students to become members of the accrediting professional bodies. The module draws on students' learning in earlier construction technology and law modules and the Building Control module at level 5. Students study the nature of fire, the relevant regulations and standards, methods of protection of buildings and occupiers and means of escape, in relation to domestic and commercial buildings.

## Case Study Project (core)

### Aims

This module requires students to develop their research skills whilst providing them with a vehicle to present their self-directed investigation and research into a Building Control case study. Students will reflect on the knowledge skills and behaviours that they have developed during their programme and from their experience and training in the workplace, recorded in their Logbook, with reference to the Building Control Surveyor Apprenticeship Standard. The purpose of this module is to take one of the projects undertaken in the workplace and recorded in their Logbook, and then to expand and investigate it further as a case study research project.

## Building Control End Point Assessment (core)

### Aims

This module is the final element of the student's apprenticeship journey. Having successfully achieved all mandatory elements of the apprenticeship programme to date, as signed off by the employer and UCEM, students will be enrolled on this unit in order to prepare for, and undertake, the government-approved End-Point Assessment (EPA). Students will collate and present evidence in a variety of ways to demonstrate their achievement of the Standard's Knowledge, Skills and Behaviours (KSBs) competencies and how these have been developed and applied throughout the programme.