Module Specification

Modern Methods of Construction

Version: 2026-27, v3.0, Approved

Contents

Part 1: Information

Module title: Modern Methods of Construction

Module code: UBLM51-15-M

Level: Level 7

For implementation from: 2026-27

UWE credit rating: 15

ECTS credit rating: 7.5

College: College of Arts, Technology and Environment

School: CATE School of Architecture and Environment

Partner institutions: None

Field: Architecture and the Built Environment

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: Yes

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: This module develops advanced knowledge and critical skills in Modern Methods of Construction (MMC), preparing students to lead the strategic adoption of digital, industrialised, and climate-positive approaches in the built environment. Students will explore MMC strategies across the full project lifecycle, evaluate technologies against key aspects of programme, cost, performance and regulatory frameworks. They will also engage in collaborative project work that mirrors professional practice in the construction industry.

Features: Not applicable

Educational aims: The main aim of this module is to enable students to critically evaluate, synthesise, and apply advanced MMC strategies that integrate digital and industrialised construction technologies, procurement and legal arrangements, regulatory and performance requirements, and collaborative professional practice, within ecological and economic boundaries.

Outline syllabus: The following provides an indicative list of headings that will help inform the syllabus although not necessarily in this sequence, or with equal measure:

MMC Strategy and Delivery
MMC categories and platforms
Integration with design coordination and buildability
Cost, procurement and contractual frameworks for MMC including Smart contracts
Offsite manufacturing, logistics, and on-site assembly
Whole-life carbon, circular economy, and regenerative approaches.

Critical Evaluation of MMC Technologies & Frameworks
Comparative analysis of MMC technologies and materials
DfMA principles and the DfMA Overlay to the RIBA Plan of Work
Regulatory, assurance, and performance frameworks
Risk, resilience, safety, and quality assurance in MMC.

Collaboration, Professional Ethics & Industry Context
Collaborative project delivery in MMC (digital collaboration, integrated project teams)
Professional ethics and codes of conduct (CIOB, RICS, CIBSE, CIAT)
Political, legal, and cultural drivers shaping MMC adoption
Global construction industry trends: policy, regulation, and innovation
Reflective practice, leadership, and communication in professional teams.

Part 3: Teaching and learning methods

Teaching and learning methods: The module is delivered through a combination of lectures, seminars, and project workshops. Lectures introduce and critically discuss modern methods of construction (MMC), including building elements, services integration, offsite manufacturing, logistics, and performance evaluation, while highlighting regulatory, sustainability, and whole-life carbon considerations. Seminars and workshops provide opportunities for students to engage with case-based problems, apply analytical methods, and receive formative feedback in preparation for the project deliverables.

The integrated implementation of industrialised construction methods is at the core of the module's learning and assessment. Students work individually and collaboratively to develop a comprehensive MMC strategy, critically evaluate technologies and frameworks, and present proposals in a professional format to a simulated client panel. This project-based approach mirrors real-world practice, requiring effective teamwork, communication, and ethical awareness, while fostering originality and self-direction.

An investigative and research-informed approach underpins the module, encouraging students to apply critical methods of analysis, synthesise evidence from practice and policy, and develop professional reports and presentations. Independent learning is essential, involving engagement with essential readings, industry standards, professional guidance (e.g. RIBA Plan of Work, DfMA Overlay), and preparation for the integrated project outputs.

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

MO1 Develop and justify a comprehensive MMC strategy for complex building scenarios that integrates design coordination and buildability, cost and procurement, offsite manufacturing and logistics, on-site assembly processes, and whole-life carbon considerations, ensuring client requirements are met within ecological and economic boundaries.

MO2 Critically evaluate MMC technologies and DfMA processes, synthesising evidence-based arguments and proposals grounded in current best practice,

industry frameworks, and standards, with explicit reference to regulatory, performance, and assurance requirements.

MO3 Demonstrate self-direction, originality, effective communication and ethics through collaborative MMC project work, critically reflecting on professional practice, teamwork, industry standards, and the wider political, legal, and cultural contexts shaping MMC adoption in the global built environment.

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 128 hours

Face-to-face learning = 22 hours

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ublm51-15-m.html

Part 4: Assessment

Assessment strategy: In professional practice, MMC advisers are often tasked with producing evidence-based recommendations for specific projects, submitting a formal report, and presenting their proposals for discussion with clients or boards. The assessment strategy for this module mirrors this process. Students will work in collaborative groups, acting as MMC consultants for a complex building case scenario, to produce an integrated project consisting of a consultancy-style report and a client-facing presentation.

The Project's report (approx. 1,500 words per student, collated into a single group submission) will set out a comprehensive MMC strategy addressing design integration and buildability, cost and procurement, offsite manufacturing and logistics, on-site construction processes, and whole-life carbon within ecological and regenerative boundaries. The report will demonstrate critical evaluation of MMC strategies for the specific scenario addressing design coordination, buildability, cost and procurement, offsite and on-site logistics, sustainability and regulations'

compliance.

The group presentation (30 minutes max. including Q&A) will offer students the opportunity to justify their key recommendations and proposals and answer questions to an audience role-playing the client. As such, this element assesses students' ability to communicate complex technical content clearly, persuasively, and professionally, reflecting real-world consultancy practice.

While the outputs are group-based, individual marks will be awarded to recognise personal contributions, critical insight, and professional competencies. The integration of in-class formative tasks with the summative project ensures students have opportunities to test ideas, refine arguments, and progressively synthesise knowledge in preparation for their final submission.

Resit: Students who do not pass the project will be required to review the group submission and create an individual Project proposal focussing on a specific task within a given case scenario. The project will comprise 1,500 words in length (per student) and an individual presentation (20-minute max. with Q&A).

Whilst the Resit Project will follow a similar brief to that described for the first sit, it may include some topic changes and/or a case scenario change.

Assessment tasks:

Project (First Sit)
Description: Consultancy Collaborative Report (1500 words) with Group Presentation (30 minutes max with Q&A). Marks will be individually awarded.
Weighting: 100 %
Final assessment: Yes
Group work: Yes
Learning outcomes tested: MO1, MO2, MO3

Project (Resit)

Description: Individual Consultancy Report (1,500 words) and Presentation (20 minutes max with Q&A).
Weighting: 100 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2, MO3

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Quantity Surveying [Frenchay] GradDip 2024-25

Quantity Surveying [Frenchay] - WITHDRAWN GradDip 2025-26

Construction Project Management [Frenchay] MSc 2026-27

Construction Project Management [Frenchay] MSc 2026-27

Construction Project Management [Frenchay] MSc 2026-27

Construction Project Management [Frenchay] MSc 2026-27