

# **Management of Construction**

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## Module Descriptor

Module Code: CON7CMC

Version: 8.00

Status: Final

Date: 18/03/2021

## Summary Module Details

### Module details

**Module Title:** Management of Construction

**Module Leader:** Martyn Quarterman

**Module Mode:** Supported online learning

**Semester:** Autumn (UK) and Spring (UK)

**Level:** 7

**Credits:** 20

**Learning Hours:** 200

### Contact & Study Hours

**Directed Study Time:** 60hrs (30%)

**Self-directed Study Time:** 70hrs (35%)

**Assessment Study Time:** 70hrs (35%)

### Assessment Type

**Coursework:** 100%

**Computer Marked Assessment:** 0%

**Self-directed Research Project:** 0%

**Portfolio:** 0%

## Module summary

This module develops both the personnel and organisational issues of construction management, with a focus on the managers of construction projects. Comprehensive understanding and practice of skills in managing, planning and controlling the safe production of a construction project are investigated.

## Taken on which programmes

MBA Construction and Real Estate (E)

MSc Building Surveying (E)

MSc Construction Management (C)

MSc Quantity Surveying (C)

**Core (C) or Elective (E)**

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## Module Aims

This module aims to examine:

- The construction management agenda, drivers and landscape environment.
- Risk, health and safety implications and assessment in construction projects.
- Project and management skill sets required of the construction manager.
- The role of construction management in resourcing projects and adding value.

## Module Learning Outcomes

- LO1. Critically synthesise current knowledge on the different construction management principles and practices, and their application to the international construction industry.
- LO2. Critically evaluate construction management skills, tasks and processes across project timelines and their application in practice.
- LO3. Critically analyse the duties and roles of the Construction Manager in relation to the management of change, value, risk and health and safety; and apply them in the context of the construction industry.
- LO4. Analyse practical construction industry problems and proffer sustainable and innovative solutions in its mitigation and management in the construction lifecycle.

## Indicative Module Content

### Module topics

- **The Role of the Construction Manager in an International Context**  
Overview of procurement types that cover international perspectives and comparisons, the sustainability agenda, international and government drivers, standardisation, EU policy and directives, ethics, partnering, public and private finance.
- **Managing Change and Risk in Construction Programmes**  
Consideration of the procurement and tendering process, and how change is accommodated on construction projects. Also, this covers the risks involved on construction projects and the practical and theoretical perspectives for managing these.
- **Managing Construction Programmes**  
An in-depth study of the various tools and techniques used in construction planning and programming. These are inclusive of Gantt chart, line of balance and network diagrams (critical path method, precedence networks and PERT) and the relative advantages or disadvantages of each of these methods in construction.

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- **Quality, Value Management and Benchmarking**

Investigation of the concept and appraisal of Total Quality Management (TQM) in the context of providing value for the client. This will include quality assurance schemes, linking to international and government drivers covered above, and the concept of comparing performance against competitors and wide market-led benchmarks.

- **Partnering and Contemporary Arrangements for Construction**

Understanding contemporary forms of project procurement that have emerged in response to the Latham and Egan reports and encourage more collaboration and integration of project teams in construction procurement.

- **Health and Safety**

An introduction to the subject of health and safety regulations, method statements and risk assessment, with a focus on ensuring the health and wellbeing of construction workers on project sites.

- **Resource Management**

Understanding the use and balancing of plant materials and labour, their interaction and interdependency in respect of cost, cashflow and the impact on the management of programme resources.

- **Managing Project Costs**

Understanding the importance of cost control and management during a construction project and the different tools and techniques for managing this. This covers cashflow management and cost-value reconciliation on construction projects.

- **Sustainability and Environmental Issues**

Consideration of the impacts of construction and how the industry can contribute to the attainment of sustainability goals (with emphasis on the sustainable development goals) through proactive measures taken during the pre-construction and construction phases.

- **The Construction Manager Toolkit**

An introduction to the construction managers extracurricular skills required to successfully navigate construction projects from start to finish. These include building and managing relationships, managing people, negotiation, decision-making and elements of leadership.

- **Cultural and Ethical Issues in Construction**

Consideration of the cultural sensitivities involved in managing diverse and inclusive construction project teams and an in-depth understanding of the importance and core values of ethics in construction.

- **Digital Technologies in Construction**

Consideration and investigation of appropriate communication principles for Construction Managers, exploration of tools and systems, common data environments and the growing use of building information modelling, its role and international application together with the advantages and disadvantages a digital landscape brings.

# Management of Construction

This content will be reviewed and updated regularly to reflect the legal, moral and financial changes in professional standards and practice.

## Overview of Summative Assessment

Module learning outcomes	Assessment	Word count or equivalent	Weighting
LO1, LO2, LO3, LO4	<b>Assessment 1</b> Coursework	2,000	40%
LO1, LO2, LO3, LO4	<b>Assessment 2</b> Coursework	3,000	60%

**Module Pass Mark (as a weighted average of all assessments): 50%**

## 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 UCEM 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.

## **Management of Construction**

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