



## **Module Specification**

# Construction Management and MIS

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## Part 1: Information

**Module title:** Construction Management and MIS

**Module code:** UBGMT7-15-M

**Level:** Level 7

**For implementation from:** 2023-24

**UWE credit rating:** 15

**ECTS credit rating:** 7.5

**Faculty:** Faculty of Environment & Technology

**Department:** FET Dept of Geography & Environmental Mgmt

**Partner institutions:** None

**Field:** Geography and Environmental Management

**Module type:** Module

**Pre-requisites:** None

**Excluded combinations:** None

**Co-requisites:** None

**Continuing professional development:** No

**Professional, statutory or regulatory body requirements:** None

## Part 2: Description

**Overview:** Not applicable

**Features:** Not applicable

**Educational aims:** See Learning Outcomes.

**Outline syllabus:** Contract law:

Essentials of contract, Formation of a contract, Contents of a contract, End of a contract, Remedies for breach of contract.

Contract administration:

Overview of the construction industry, Project delivery methods, Forms of contract, Standard bidding documents, Tendering procedure, Conditions of contract.

Estimating and tendering:

Estimating process, Collection and calculation of cost information, Use of estimating software, Preparing the BOQ, Bidding strategy.

Production process improvement:

Productivity and project performance, Work study: method study and work measurement, Lean construction and waste management, Management systems and processes, Site organization.

Management of construction equipment:

Acquisition of equipment, Financing equipment, Systematic equipment selection, Setting hire rates, Assignment of equipment, Maintenance of equipment.

Development of MIS:

Use MS Access or similar programme: system analysis, design, development and implementation.

Information Technology and Infrastructure:

IT infrastructure and emerging technologies, database and information systems, telecommunications, the internet, security of information systems.

Key applications for Digital Age:

Operational excellence and customer intimacy, E-commerce, Digital marketplace, Managing knowledge, Enhancing decision making, Application of asset management.

### **Part 3: Teaching and learning methods**

**Teaching and learning methods:** Student time will be allocated as follows:

Lectures: 54 hours Tutorials/seminars/project follow-up: 18 hours Directed learning:

12 hours Summative assessment: 23 hours

Self directed learning: 43 hours Total student hours: 150 hours

Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc.

The class based delivery will involve a mixture of lectures/tutorials and computer-based learning.

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

**MO1** Demonstrate critical understanding of the legal aspects of construction contracts and use appropriately forms of contract for procurement of construction works.

**MO2** Apply appropriately industry standard estimating and tendering processes and formulate bidding strategies in response to market analysis, bid evaluation criteria and behaviour of competitors.

**MO3** Select, from a range, appropriate tools and techniques to increase productivity and improve project performance.

**MO4** Demonstrate appropriate management of construction equipment including selection, acquisition, setting hire rates and maintenance at both project and company level.

**MO5** Demonstrate a critical understanding of management information systems and use appropriately associated technology for better management of a construction company.

**MO6** Solve a wide range of complex problems related to the analysis, design and construction of management information systems.

**MO7** Identify a range of appropriate solutions and critically evaluate and justify proposed design solutions for management information systems, such as decision making, business systems, asset management.

**Hours to be allocated:** 150

**Contact hours:**

Face-to-face learning = 78 hours

Total = 150

**Reading list:** The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://uwe.rl.talis.com/index.html) via the following link <https://uwe.rl.talis.com/index.html>

## **Part 4: Assessment**

**Assessment strategy:** Assessment is based on a written examination and a project report.

The strategy has been chosen to ensure that fundamental engineering principles are assessed under controlled conditions, while a more open ended research based assignments are used to encourage wider engagement and reflection on this topic.

### **Examination**

Learning outcomes 1-4 are assessed with the 180 minutes examination.

### **Report**

Learning outcomes 5-7 are assessed with the project report of 2000 words.

Introductory and follow-up tutorials are available in relation to the project undertaken and students are expected to complete the computer-based tasks specified under the project brief during these sessions.

Students are advised to attend all tutorial/project sessions, which provide them the opportunity to gain formative feedback.

**Assessment tasks:**

**Examination (First Sit)**

Description: Examination (180 minutes)

Weighting: 75 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

**Report (First Sit)**

Description: Report (2000 words)

Weighting: 25 %

Final assessment: No

Group work: No

Learning outcomes tested: MO5, MO6, MO7

**Examination (Resit)**

Description: Examination (180 minutes)

Weighting: 75 %

Final assessment: Yes

Group work: No

Learning outcomes tested:

**Report (Resit)**

Description: Report (2000 words)

Weighting: 25 %

Final assessment: No

Group work: No

Learning outcomes tested:

## **Part 5: Contributes towards**

This module contributes towards the following programmes of study:

Civil Engineering [Jan][FT][Northshore][4yrs] - Not Running MEng 2020-21