Construction Site Management

Module Descriptor

Module Code: SMA5CSM

Version: 7.00

Status: Final

Date: 28/02/2024

Summary Module Details

Module Title: Construction Site Management

Module Leader: Rob Otter

Module Mode: Supported online learning

Semester: Spring (UK)

Level: 5

Credits: 20

Learning Hours: 200

Contact and Study Hours:

Directed Study Time: 90 hrs (45%)

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

Assessment Study Time: 60 hrs (30%)

Assessment Type:

Coursework: 0%

Computer Based Assessment: 0%

Portfolio: 100%

Presentation: 0%

Project: 0%

Practical: 0%

Self-directed Research: 0%

Module Summary

This module aims to develop understanding of, and practice the skills associated with, managing, planning, and controlling the production of building. This module is seen as the focus for the construction manager at Level 5 in developing the skills directly related to the construction process. It will allow the student to develop the management theory of earlier modules with the practical aspects of site management. The module will relate to construction site management within the global arena and is not intended to be country specific. Students will be encouraged to identify with their own working environment.

Taken on which Programmes

BSc (Hons) Construction Management (C)

Core (C) or Elective (E)

Module Aims

This module aims to:

- Develop managerial skills at site level, with regard to personnel, plant, and materials.
- Utilise research and theory and explore the practice of these in relation to site-based scenarios, problem-solving issues.
- Establish the learning experience within the context of construction application, thus enabling the integration of theoretical knowledge and understanding with best industrial practice, including health, safety and welfare, and environmental sustainability.

Module Learning Outcomes

LO1 Examine the managerial skills required to manage, plan, and control a construction site.

LO2 Explain how relevant management principles, construction techniques and sustainability relate to the process of managing construction sites.

LO3 Calculate and process information, integrate theory and practice, define, and solve problems and communicate solutions effectively.

LO4 Apply the skills of effective construction site management: planning, application of regulations, management of quality assurance and risk processes, and management of the construction process.

Indicative Module Content

Module topics

- **The construction site**

  The construction site set up, site accommodation, site administration, welfare facilities, site security methods to keep the site and its personnel secure, considerate constructors to reduce impact on local environment.

- **The roles of personnel**

  The roles of personnel directly associated with the construction site; client, architect, quantity surveyor, engineers, the building contractor's team, project manager and site manager comparison, public liaison.

- **The environment**

  Environmental issues; construction and its effect on wildlife. Pollution and conservation. Waste and the control of waste on construction sites, environmental management policies. Sustainable construction.

- **Site management**

  Managers and leaders, leadership theories, problem solving and decision making. Technology and construction. The site management and stress. The site manager and a sustainable approach to construction.

- **Communication**

  Site information flow, consultant co-ordination. The art of communication, communication by writing and speaking, developing communication skills. Site meetings; planning and chairing meetings, the dos and don'ts of meetings. Negotiation, the principles of negotiation, negotiation skills.

- **Planning and programming**

  Producing a network diagram, determination of the critical path, preparation of resource histograms, resource levelling, precedence networks, bar charts. Project management software.

- **Health and safety management**

  The management of health and safety, health, and safety on site, CDM 2015 with focus on Principal Contractor, health and safety hazards to site employees, visitors, and the public. Safety management. Risk assessment and method statement.

- **Resource management**

  Utilisation of construction plant, materials, site factors influencing the selection of plant and materials. Utilisation of labour, the timing of operations.

- **Cost control**

  Construction site cost control; fixed costs and variable costs, cash flow, cash flow forecasting, budgeting. Cost centres, project finance.

- **Lean construction**

  Concept of lean thinking, implementing lean construction internationally, increasing productivity, value management. Critical success factors for project management; partnering, change culture. Modern Methods of Construction (MMC). Sustainability.

This content will be reviewed and updated regularly to reflect the legal, ethical, 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	**Assessment 1** Portfolio	4,000	100%

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

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.

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