

**BTEC**

# **HIGHER NATIONALS**

**Construction**



**Higher National  
Certificate Lvl 4**

# Unit 21: Site Supervision & Operations

<b>Unit code</b>	<b>Y/615/1407</b>
<b>Unit level</b>	<b>4</b>
<b>Credit value</b>	<b>15</b>

## Introduction

The construction of buildings and infrastructure involves many different types of work and many different people. The skills required to successfully manage the diverse groups of people on a building site, and to monitor and assess their work, is critical to both the success of the project and to ensure the safety of those working.

Through this unit students will develop the skills and techniques necessary to manage the people and processes of a building site, ensuring the quality of work, safe working practices and the interactions of different 'trades'.

Topics covered in this unit include: evaluating construction information, monitoring quality, identifying and notifying of defects, sustainable methods of construction, site safety regulations, Health & Safety regulations, people management, performance management, site meetings, contractor and sub-contractor relations.

## **Learning Outcomes**

By the end of this unit students will be able to:

- 1 Evaluate construction information to determine quality requirements
- 2 Prepare a report on defects and recommended remedial actions
- 3 Assess a pre-construction Health & Safety plan for a given construction project, in relation to local and national regulations
- 4 Discuss methods for evaluating and improving the performance of site staff.

## Essential content

### LO1 Evaluate construction information to determine quality requirements

*Construction information:*

Construction drawings

Specifications

Schedules

Building Information Modelling.

*Statutory documents related to quality:*

Building regulations

Health & safety regulations.

### LO2 Prepare a report on defects and recommended remedial actions

*Site visits and evaluation:*

Patent defects

Latent defects

'Walking the site'

Identifying defects

Recording defects

Notifying defects.

*On-site testing/off-site testing:*

Prototypes

Mock-ups

Testing facilities

Quality certification systems.

*Quality control responsibilities:*

Architect

Civil engineer

Clerk of works

Contractors/sub-contractors

Site staff.

**LO3 Assess a pre-construction Health & Safety plan for a given construction project, in relation to local and national regulations**

*Construction design management:*

Client responsibilities

Professional responsibilities

Information recording and sharing.

*Statutory health & safety requirements:*

Site safety monitoring

Responsibilities

Notifications.

*Risk assessment and management*

#### LO4 **Discuss methods for evaluating and improving the performance of site staff**

*Working relationships:*

Effective communication

Motivation

Managing conflict

Equality and diversity.

*Performance monitoring and evaluation:*

Supervision and supervisors

Target setting

Review

Self-evaluation

Supervisor evaluation

Peer evaluation

Training and development needs.

*Site manager responsibilities:*

Leadership techniques

Identifying staff training needs

Training and development planning

Continuing Professional Development.

## Learning Outcomes and Assessment Criteria

Pass	Merit	Distinction
<b>LO1</b> Evaluate construction information to determine quality requirements		<b>LO1 and LO2</b>  <b>D1</b> Review construction information and schedules of defects to ascertain patent defects and the implication for defects liability
<b>P1</b> Define quality requirements for a given project through the review of drawings, specifications and schedules  <b>P2</b> Explore the relationship between project quality requirements with statutory requirements	<b>M1</b> Evaluate the impact of potential changes in project quality requirements that are necessary to meet statutory requirements	
<b>LO2</b> Prepare a report on defects and recommended remedial actions		
<b>P3</b> Identify defects for a given construction project and produce a schedule of defects  <b>P4</b> Explore remedial actions necessary to address identified defects	<b>M2</b> Discuss the difference between patent and latent defects and their associated implications for remedial actions	

Pass	Merit	Distinction
<p><b>LO3</b> Assess a pre-construction Health &amp; Safety plan for a given construction project, in relation to local and national regulations</p>		<p><b>D2</b> Give examples of methods for promoting a positive approach to Health &amp; Safety for a construction team</p>
<p><b>P5</b> Discuss the importance of construction design management for ensuring site safety</p> <p><b>P6</b> Discuss local and national requirements for Health &amp; Safety in relation to construction projects</p>	<p><b>M3</b> Evaluate the impact of Health &amp; Safety violations on construction projects</p>	
<p><b>LO4</b> Discuss methods for evaluating and improving the performance of site staff</p>		<p><b>D3</b> Analyse the relationship between performance management and Health &amp; Safety legislation</p>
<p><b>P7</b> Describe the methods for evaluating the performance of team members</p> <p><b>P8</b> Recommend training and development strategies to improve performance</p>	<p><b>M4</b> Evaluate the relationship between equality and diversity and performance management in the construction industry</p>	



## Recommended resources

### Textbooks

- BARBER, J. and INSTITUTION OF CIVIL ENGINEERS (2002) *Health & Safety in Construction: Guidance for Construction Professionals*. London: Thomas Telford.
- CHARTERED INSTITUTE OF BUILDING (2014) *Code of Practice for Project Management for Construction and Development*. 5th ed. Chichester, West Sussex Wiley-Blackwell.
- COLES, D., BAILEY, G. and CALVERT, R.E. (2012) *Introduction to Building Management*. London: Routledge.
- COOKE, B. and WILLIAMS, P. (2009) *Construction Planning, Programming and Control*. Chichester, West Sussex: Wiley-Blackwell.
- DAINTY, A. and LOOSEMORE, M. (2012) *Human Resource Management in Construction: Critical Perspectives*. 2nd ed. London: Routledge.
- FORSTER, G. (1986) *Building Organisations, and Procedure*. Harlow: Longman Scientific & Technical.
- HARRIS, F., MCCAFFER, R. and EDUM-FOTWE, F. (2013). *Modern Construction Management*. Chichester, West Sussex: Wiley-Blackwell.
- HUGHES, P., PHILLIP, W. and FERRETT, E. *Introduction to Health & Safety in Construction: for the NEBOSH National Certificate in Construction Health & Safety*. 5th ed. Abingdon: Routledge.

### Websites

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| <a href="http://www.ciob.org">www.ciob.org</a>     | Chartered Institute of Building                  |
| <a href="http://www.pmi.org">www.pmi.org</a>       | Project Management Institute                     |
| <a href="http://www.cipd.co.uk">www.cipd.co.uk</a> | Chartered Institute of Personnel and Development |
| <a href="http://www.ice.org.uk">www.ice.org.uk</a> | Institutions of Civil Engineers                  |

## **Links**

This unit links to the following related units:

*Unit 4: Construction Practice & Management*

*Unit 5: Legal & Statutory Responsibilities in Construction*

*Unit 6: Construction Information (Drawing, Detailing, Specification)*

*Unit 12: Financial Management & Business Practices in Construction*

*Unit 13: Tender & Procurement*

*Unit 14: Building Information Modelling*

*Unit 23: Contracts & Management*

*Unit 24: Project Management*

*Unit 45: Maintenance & Operations*