

# Quantity Surveying Fundamentals

## Course Structure

This distance learning programme is delivered across 24 weeks (6 months) modular topics which provide delegates with a broad understanding of the globally applicable Quantity Surveying standards.

Each topic has been composed to provide candidates with a supportive and informative training schedule blended together using a combination of materials:

- Interactive Videos
- Online audio presentations
- Topic related training material
- Case Studies & Practical exercises
- Online forum for tutor and delegates
- Virtual learning sessions

### Online audio presentations

Specifically chosen the e-learning courses within this module will assist delegates in gaining an understanding of the globally applicable standards of Quantity Surveying.

### Case Studies and Practical Exercises

Simple case studies within the distance and blended approach assist in bringing the theory to life. Delegates are provided with structured case studies, which will direct them to share their answers with their fellow delegates within the module forum and web class sessions.

### Topic Related Reading Material

- Provides a great opportunity to learn from existing theory and practice.
- Learners can also study at their own pace and when convenient. These reading materials are available online so can be accessed anywhere at any time to help provide deeper context to the tutor audio presentations.

### Online forums to share information and ask questions

Forums provide a great opportunity to share information and pose questions you may have related to the topics. During distance learning, having access to a forum allows all delegates to also share each other's questions and responses and helps to provide a community feel.

### Virtual Learning

Virtual learning sessions have been designed to support the delegates and help consolidate their knowledge. These structured training sessions will allow the tutor to teach and explain the knowledge and theory in a live environment. Being online is like a face to face session without the need to leave the office, so delegates can be based anywhere geographically.

## Course Contents

### Introduction

- overview of the course and how it is structured
- studying online
- the learning activities for the whole course
- requirements for each technical unit

### Unit 1 Construction Technology and Environmental Services

- the functional requirements for domestic construction
- the design process including the RIBA plan of work
- alternative construction solutions for functional elements of a building

### Unit 2 Procurement and Tendering

- procurement routes
- tendering and negotiation processes
- the production of tender documents
- ancillary processes such as partnering and framework agreements

### Unit 3 Cost Prediction and Analysis

- factors affecting the cost of a building and its elements
- cost planning and the financial control of projects
- source of cost data and adjustments for location, specification, time, and market forces
- whole life costing.

### Unit 4 Quantification and Costing

- the quantification of construction works (including both measurement and definition)
- the costing of construction works
- the use of BIM in undertaking Quantity Surveying activities on a project

### Unit 5 Contract Practice

- legal systems and the framework for the operation of construction contracts;
- contractual mechanisms and procedures relevant to financial management of a project
- other common contractual mechanisms.

### Unit 6 Project Financial Control

- the control of costs during the construction phase of a project
- the reporting and forecasting of costs during the construction phase
- the principles of contingencies/risk allowances.
- the use of cash flows in financial management.

## Learning Outcomes

### Unit 1 Construction technology and environmental services

- Develop an understanding of the functional requirements of different types of building
- Be able to identify the key stages in the RIBA plan of work
- Be able to discuss alternative construction solutions in relation to functional elements.

### Unit 2 Procurement and tendering

- Understand the main types of procurement used in both the public and private sectors
- Be able to discuss appropriate tendering and negotiation processes for different procurement routes
- Have an appreciation of ancillary processes such as partnering and framework agreements

### Unit 3 Design economics and cost planning

- Be able to identify the factors affecting the cost of a building and its elements
- Understand how cost planning assists in the financial control of projects
- Be able to discuss the various sources of cost data and the adjustments required for changes in location, specification, time, and market forces.
- Understand the importance of considering whole life costs during the design of a project

### Unit 4 Quantification and costing

- Be able to take off quantities for major elements of simple buildings
- Understand how to price unit rates and prepare an estimate for the works
- Appreciate how the introduction of BIM will impact the work of the quantity surveyor

### Unit 5 Contract practice

- Understand the legal system which underpins the operation of construction contracts
- Be able to discuss contractual mechanisms for financial aspects such as change procedures, interim valuations, and final accounts
- Understand the importance of general contractual provisions such as liquidated and ascertained damages, early possession, and practical completion.

### Unit 6 Project financial control

- Appreciate the need for effective control of costs during the construction phase of a project
- Understand how to prepare a cost report during the construction phase
- Be able to discuss the use of cash flows in financial management.

## End of Course Assessment

You will be assessed through an online examination. The online examination will take place at the end of the 6-month course and you will need to acquire the requisite minimum score to successfully complete the course.