

Principles of Construction Programming & Planning

Course Structure

This online learning course is delivered across 12 weeks (3 months) with modular topics which provide delegates with a broad understanding of the Principles of Construction Programming & Planning.

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 modules within this course will assist delegates in gaining an understanding of the globally applicable standards of programming and planning.

Case Studies and Practical Exercises

Simple case studies 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. With online 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 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

- Week 1** **Introduction to Construction project management**
This week introduces the topic of construction project management and puts the subjects covered by the course into context.
- Week 2** **Project definition, briefing and the stakeholder**
This week explores how a project is defined and the process for selecting a team to deliver the project.

Quiz covering weeks 1 and 2
- Week 3** **Planning**
This week introduces the process of planning and investigates different planning approaches, work breakdown structures from inception to completion.

Quiz covering week 3
- Weeks 4&5** **Scheduling**
These weeks cover the purpose of scheduling, the detailed process and the benefits. Delegates will also be guided through how to allocate durations to activities, the logic in building the schedule, the concept of float and the critical path.

Case studies and practical exercises
- Weeks 6&7** **Monitoring & Control**
These weeks develop your understanding of monitoring the performance of a project during construction, adopting change management to rectify any deviations from the plan and reporting progress.
- Week 8** **Resource management**
This week the allocation of resources to a schedule is explained and different methods of presenting the schedule examined.
- Week 9** **Method statements**
This week the more descriptive elements of a project plan are covered providing detail on how the construction work will be undertaken.
- Week 10** **Project risk management including health and safety**
This week looks at the impact of risk management and health and safety requirements on the programme.
- Weeks 11&12** **Quality control, handover procedure, soft landings**
These weeks the need for quality control is examined along with the processes involved at the end of a project.

Quiz covering weeks 6 to 12

Learning Outcomes

- LO1. Demonstrate knowledge and understanding of the principles of programming and planning in construction and a broad knowledge of the associated concepts and theories.
- LO2. Demonstrate the ability to create a precedence network, identify the critical path and subsequently produce a Gantt Chart.
- LO3. Demonstrate knowledge and understanding of allocating resources to a programme and producing a detailed method statement.
- LO4. Select appropriate approaches to managing construction time and cost.

Course Assessment

Delegates will be assessed through online quizzes, case studies and practical exercises throughout the course. You must achieve 60% or more in each quiz to successfully complete the course. Additional attempts will be permitted should you not be successful on your first attempt.

Text Book

Access to the following text book will be provided as part of the course

Construction Planning, Programming and Control

(3rd Edn) by Brian Cooke and Peter Williams, Wiley-Blackwell, ISBN 978-1-4051-8380-2