

Corporate Entry Examination Syllabus Commercial Management

The hours of study required to complete the Direct Entry Examination Syllabus for Commercial Management are:-

Civil Engineering Construction	100
Civil Engineering Contract Administration	100
Civil Engineering Management	100
Total hours	300

Introduction

The purpose of this booklet is to provide members of the Institution with a guide to the procedures required to become qualified in Civil Engineering Commercial Management and the subjects which are required to be studied to achieve this through the Corporate Entry Examination.

The relationship of examinations and membership

There are several entry routes to becoming a Corporate Member of the Institution of Civil Engineering Surveyors: by Degree; NVQ; other qualifications such as HNC and HND. Some of these may not, despite being excellent qualifications in their field, cover the specialism of civil engineering commercial management in the depth required by the Institution. There may also be practitioners applying for entry to membership who lack the experience of this specialism. In order to fulfil its requirements the Institution have developed a Corporate Entry examination, which is designed to provide the top-up needed.

Examination

A precursor for entry to the examination is that each candidate be a registered member of the Institution.

The Institution accepts that by the time a candidate sits the subject areas of this examination, the general principles of the construction industry will be well understood. Therefore the examinations will concentrate on examples selected to illustrate principles and will be designed to be a test of knowledge and application of the subject areas as they relate to civil engineering.

The examination consists of a three hour paper for each of the Modules in the syllabus.

Places and dates of examinations

Examinations are held annually in May with an entry closing date of 1st March of the given year, and centres are arranged as required following receipt of examination applications and appropriate fees.

Previous examination papers

Copies of previous examination papers are available upon application to the Membership Secretary upon payment of the appropriate fee.

Results of examinations

Candidates sitting the examination will be notified whether or not they have passed within three months of the date of sitting the examination. The Institution is not obliged to give any other details concerning the marking of any examination.

Examination fees

Candidates are required to pay fees to sit the examination. Details of the scale of fees are obtainable from the Membership Secretary.

Failure to attend an examination

Should a candidate, once accepted to sit the examination, withdraw his or her name, or fail to attend to sit part or all of the examination then the examination fee will be forfeit. The Institution may, however, at its discretion, and if a good reason exists, refund the examination fee, or part thereof. Should illness be the reason for the failure to attend then a medical certificate must be forwarded to the Membership Secretary with an explanation.

Reference to candidates

Each candidate, after acceptance of their application, will be assigned a reference number by the Membership Secretary. All candidates accepted will be referred to by this assigned number.

Rejection of applications

The Institution may reject any application to sit for the examination and is not obliged to give any reason for such rejection. Should an application be rejected then the examination fee will be refunded in full.

Instructions to candidates

Candidates will receive instructions regarding the conduct of the examination, the equipment they will be required to provide and all other necessary information. Candidates will be expected to provide their own writing and drawing materials. Stationery will be provided at the examination centre by the Institution. Candidates are permitted to take into the examination room any document specified in the instructions to candidates. Permitted documents must be unmarked.

Infringement of regulations

Any infringement of the regulations pertaining to the conduct of the examination may result in expulsion from the examination room for the remainder of the examination. In such an event the examination fee will be forfeit.

Distance learning course

To assist the candidate in preparing for the examination the Institution has sponsored a Distance Learning Course, details of which can be obtained from the Membership Secretary.

Module 1: Civil Engineering Construction

The aim of this unit is to:

- Make the student aware of the main forms and methods of civil engineering construction
- Establish an understanding the temporary works associated with these
- Examine the procedures involved in soil engineering

Objectives

On completion of this module the candidate should be competent to:

- Understand the types of construction encountered in civil engineering
- Be familiar with the importance of temporary works
- Appreciate the requirements of soils engineering

Civil Engineering Construction

Earthworks, embankments and cuttings and soil stabilisation

Piling

Structures

Roads and Airfields

Railways

Tunnelling

Waste and Waste Water Installations

Pipeline Installations

Coastal and river defences

Temporary works and requirements in connection with the above

Earth Science

Site investigation

Earthworks classification, testing and soil properties

Earthworks balances, mass haul and disposal procedures

Geological techniques

Module 2: Civil Engineering Contract Administration

The aim of this unit is to:

- Develop an understanding of the various forms of contract used in civil engineering
- Understand the procedures required for periodic valuation and settlement of accounts
- Establish an understanding the measurement and specification of civil engineering works
- Provide knowledge of the procedures available for dispute resolution

Objectives

On completion of this module the candidate should be competent to:

- Demonstrate knowledge of the various forms of contract available and their application
- Demonstrate knowledge of the various procedures for valuation and settlement of accounts
- Demonstrate knowledge of the methods of measurement and specification available
- Demonstrate knowledge of the disputes resolution procedures followed on civil engineering contracts

Conditions of Contract

Revision on the law of contract

The several forms of contract available and the circumstances for their use

Methods of Valuation and Measurement

Techniques for the process of periodic valuations and settlement of accounts

Methods of Measurement used for civil engineering works

Civil Engineering Specifications.

Dispute Resolution Procedures

The various procedures available and the circumstances of their use

Module 3: Civil Engineering Management

The aim of this unit is to:

- Develop a comprehensive understanding of the management process involved in the organisation of a Civil Engineering contract from policy formation to site works
- Understand the complex relationships that exist within the Industry
- Understand factors that form the policies of the organisation and how these are presented or marketed to staff and clients
- Examine problems and apply relevant management theories to develop a solution
- Be aware of human factors and account for changes in personnel due to social or economic factors

Objectives

On completion of this module the candidate should be competent to:

- Understand the process of management in a Civil Engineering environment
- Determine policies for marketing, production control and organisation of a company
- Select suitable staff for a given operation, maintain working relationships and motivation

Marketing

The significance of marketing for a Civil Engineering organisation

Organisation

Setting objectives, developing corporate and operational strategies and policies

Factors that affect set objectives and how to react to these social, economic and environmental influences

Determining long and short term goals for the organisation

Determining management structures, functions and relationships, suitable control and communication systems for central and decentralised operations

Production

Roles of contract and site managers, their relationship to other members of the construction team

Design of site organisation, the formation of policies and procedures

Supervision of operations and labour

Co-ordination of labour, plant, materials, suppliers, sub-contractors, planning schedules

Plant management and operation policy

Commercial

The procedures for obtaining finance and financial control of a project

Partnering policy

Techniques for risk assessment and programming

Value engineering/management

Insurance procedures

Types of claims and the procedures for notification, presentation, submission and settlement

Human Resources

Motivation leadership and group behavior
Personnel management and policy, recruitment, selection and engagement
Education and Training policy
Employment legislation and conditions of employment
Health and Safety and welfare planning