



Course List 2008

Civil Engineering Commercial Training

From SURCO, the trading company of the Institution of CIVIL ENGINEERING SURVEYORS

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CONTENTS

The Industrial Marketplace	2
Commercial Awareness	2
Identifying and Evaluating Change and the Importance of Records	2
Procurement in the UK and Europe	2
Engaging and Managing Subcontractors	3
The Estimating Process	3
Financial Controls: Reporting and Forecasting	3
Formation of Contracts for Procurement Specialists	3
Procurement, Contract Law, Duty of Care and Dispute Resolution	3
Aspects of the Law of Tort	3
The CDM Regulations	4
Environmental Law and the Waste Management Regulations	4
Health and Safety at Work	4
Identifying, Classifying and Accommodating Risk	4
Indemnity and Insurance	4
Civil Engineering Standard Method of Measurement	4
Method of Measurement for Highway Works	5
ICE Conditions of Contract (6th and 7th Editions)	5
New Engineering Contract	5
Frameworking and Partnering	5
Cost Reimbursable Projects	5
Delay, Disruption and Extension of Time	5
Planning, Programming and Resource Management	6
Commercial Training for Foremen	6
ICE Conditions of Contract: Ground Investigation Version (2nd Edition)	6
Insolvency Law	6
International Conditions of Contract	6
Standard Forms of Subcontract	6
A Reintroduction to Measurement	7
Mentoring	7
An Introduction to Construction Technology for Non-cognate Surveyors	7
An Introduction to Quantity Surveying	7
An Introduction to Construction Technology and Civil Engineering Measurement	7

THE INDUSTRIAL MARKETPLACE

STM1

Duration 4 hours (half day)
Maximum 15 delegates

AIMS

To give early career civil engineers and quantity surveyors an introduction to the financial and legal basis of civil engineering contracts and their financial and legal management.

COVERS

- Project procurement
- Technical, commercial and contractual basis
- Tender process
- Identification of risk

COMMERCIAL AWARENESS

STM2

Duration 6 hours (one day)
Optional extra 6 hours (two day)
Maximum 15 delegates

AIMS

To give early career civil engineers and quantity surveyors an introduction to the financial and legal basis of civil engineering contracts and their financial and legal management.

COVERS

- Project procurement
- Technical, commercial and contractual basis
- Tender process
- Identification of risk
- Rates and prices
- Formation of contract
- Subcontracting
- Change and change control
- Records
- Cash management
- Forecasting and reporting

IDENTIFYING AND EVALUATING CHANGE AND THE IMPORTANCE OF RECORDS

STM3

Composite workshop
Duration 6 hours (one day)
Maximum 15 delegates

AIMS

To familiarise engineers and quantity surveyors with the principle of change in work requirements, ordered variations, procedures for dealing with change and the importance of recording the effects and consequences for payment and restitution of time lost.

COVERS

- The tender basis
- Cause of change
- Recovery processes
- Entitlements
- Records

PROCUREMENT IN THE UK AND EUROPE

STM4

Duration 6 hours (one day)
Maximum 15 delegates

AIMS

To familiarise civil engineers and quantity surveyors and other commercial staff with some of the procurement processes used for civil engineering work in the UK and Europe.

COVERS

- Market opportunities (public and private sector)
- Pre-qualification
- Types of project
- Bidding process
- Submission and acceptance
- Workshop

ENGAGING AND MANAGING SUBCONTRACTORS

STM5

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

To familiarise civil engineers and quantity surveyors with the process of employing and managing domestic subcontractors.

COVERS

- Procuring subcontractors
- The subcontract
- The subcontractor on site
- Subcontract payment
- Dispute resolution
- Completion

THE ESTIMATING PROCESS

STM6

Duration 4 hours (half day)
Maximum 15 delegates

AIMS

To give early career civil engineers and quantity surveyors an introduction to the preparation of a tender.

COVERS

- Definition
- Tender process

FINANCIAL CONTROLS REPORTING AND FORECASTING

STM7

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

To promote an understanding of the need for financial controls on civil engineering projects. To promote an understanding of regular periodic cost/value reconciliations, their preparation and significance. To promote an understanding of financial forecasting, the process and the significance.

COVERS

- Final reporting as an essential part of the decision making process
- Recording cost
- Allowance reconciliation
- Monthly summary reconciliation
- Forecasting
- Workshop

FORMATION OF CONTRACTS FOR PROCUREMENT SPECIALISTS

STM8

Duration 6 hours (one day)
Maximum 15 delegates

AIMS

To promote an understanding of the formation of contracts for buyers and other procurement specialists.

COVERS

- Formation of simple contracts
- Contracts as a deed
- Supply contracts
- Subcontracts
- Modifications to standard forms
- Exclusion clauses and risk balance

PROCUREMENT, CONTRACT LAW, DUTY OF CARE AND DISPUTE RESOLUTION (COMPOSITE MODULE FOR 'EARLY CAREER' USE)

STM9

• Duration 6 hours (one day)
• Maximum 15 delegates

AIMS

To familiarise engineers and quantity surveyors with some aspects of contract law, the formation of contracts and the dispute resolution process. To familiarise engineers and quantity surveyors with the principles of duty of care and the law relating to nuisance.

COVERS

- Basic principles of contract
- Standard forms of contract
- Performance and payment
- Breach of contract and remedies
- Basic principles of public, private and statutory nuisance

ASPECTS OF THE LAW OF TORT

STM10

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

To familiarise civil engineers, quantity surveyors and other commercial personnel of the common law, generally and in matters of nuisance, negligence and economic loss.

COVERS

- The basics of English law
- What is tort?
- The tort of nuisance
- The tort of negligence
- The tort of misrepresentation
- Architects and engineers

THE CDM REGULATIONS

STM11

Duration 6 hours (one day)
Maximum 15 delegates

AIMS

To give an appreciation of why we need these regulations and how they interact with other health and safety legislation. To explain the importance of identifying and dealing with hazards at the earliest possible stage. To explain the duties of all those involved and to explain the importance of good management systems and the need for audit trails.

COVERS

- The philosophy behind the CDM regulations 2007
- Associated legislation
- The regulations and the code of practice
- Duty holder's responsibilities
- Information packs
- Health and safety plan
- Health and safety file
- Good management practices
- Workshop on hazard identification and elimination and risk reduction

ENVIRONMENTAL LAW AND THE WASTE MANAGEMENT REGULATIONS

STM12

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

To give practical guidance on complying with the environmental legislation that applies when planning and managing a construction project.

COVERS

- Prevention of pollution
- Work at construction and demolition sites
- Depots
- Statutory nuisance
- Emissions to air
- Noise and vibration
- Water
- Waste
- Contaminated land

HEALTH AND SAFETY AT WORK

STM13

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

To promote a culture of health and safety in the workplace.

COVERS

Details under review.

IDENTIFYING, CLASSIFYING AND ACCOMMODATING RISK

STM14

Duration 6 hours (one day)
Maximum 15 delegates

AIMS

To promote an understanding of structured commercial risk management and to develop a knowledge of risk identification, classification and accommodation amongst civil engineers, quantity surveyors and other commercial personnel.

COVERS

- Risk identification
- Risk classification
- Decision analysis
- Simple workplace assessment
- Workshop

INDEMNITY AND INSURANCE

STM15

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

To familiarise delegates with the employer's common indemnity requirements (inc bonds, warranties and guarantees). To familiarise delegates with common contractual requirements for insurance (PI, PL and works). To familiarise delegates with mandatory insurance requirements for employers (employers liability).

COVERS

- History
- The insurance market
- Insurable interest, insurance law and the insurance contract
- The ICE conditions of contract
- Mandatory requirements
- Other cover
- Incidents and accidents
- Indemnities and bonds
- Preparing and submitting claims

CIVIL ENGINEERING STANDARD METHOD OF MEASUREMENT

STM16

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

To give civil engineers and quantity surveyors an understanding of CESMM 3, its principles and its use.

COVERS

- Background
- Principles of CESMM 3
- Bill of quantities
- Classes
- Workshop

METHOD OF MEASUREMENT FOR HIGHWAY WORKS

STM17

Duration 6 hours (one day)
Maximum 15 delegates

AIMS

To give civil engineers and quantity surveyors an understanding of the MMHW, its principles and its use.

COVERS

- Background
- Principles of the MMHW
- Bill of quantities
- Selected matters
- Workshop

ICE CONDITIONS OF CONTRACT (6TH & 7TH EDITIONS)

STM18

Duration 8 hours (one day)
Maximum 15 delegates

AIMS

To give early and mid-career civil engineers and quantity surveyors a thorough appreciation of the rights and duties of all parties to the ICE contracts and an understanding of the claims and dispute resolution procedures.

COVERS

- The contract
- Rights and obligations of the parties
- Contract administration
- Claims and disputes

NEW ENGINEERING CONTRACT

STM19

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

To introduce delegates to the NEC2 (ECC) and NEC3 forms of contract. To familiarise with the principles of mutual trust and co-operation. To familiarise delegates with the structure and workings of the contract and core clauses.

COVERS

- The 'solutions' philosophy
- History (editions 1, 2 and 3)
- The structure
- The primary and secondary options
- Option z – supplementary clauses
- Partnering and option x12
- Core clauses
- Workshop

FRAMEWORKING AND PARTNERING

STM20

Due Summer 2008.

AIMS

Due Summer 2008.

COVERS

Due Summer 2008.

COST REIMBURSABLE PROJECTS

STM21

Due Summer 2008.

AIMS

Due Summer 2008.

COVERS

Due Summer 2008.

DELAY, DISRUPTION AND EXTENSION OF TIME

STM22

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

To promote an understanding of the provisions for extension of time and liquidated damages under the ICE forms of contract. To familiarise delegates with common causes of delay and disruption and the difficulties of demonstrating cause and effect.

COVERS

- Periods of completion
- Failure to complete on time
- Doctrine of prevention
- Extension of time provisions
- Time and money – two separate issues
- Workshop

PLANNING, PROGRAMMING AND RESOURCE MANAGEMENT

STM23

Duration 6 hours (one day)
Maximum 15 delegates

AIMS

To promote and foster an understanding of the importance of planning and programming in the tender and site management process. To consider planning techniques and project management systems.

COVERS

Details under review.

COMMERCIAL TRAINING FOR FOREMEN

STM24

Duration 6 hours (one day)
Maximum 15 delegates

AIMS

To give foremen and section foremen an insight into some corporate, contractual, legal and commercial issues in construction companies and on site.

COVERS

- Why do we go contracting?
- Contractual relationships
- Legal issues; duty of care, health and safety, environmental issues, insurances and nuisances
- Commercial issues and reporting

ICE CONDITIONS OF CONTRACT: GROUND INVESTIGATION VERSION (2ND EDITION)

STM25

Duration 6 hours (one day)
Maximum 15 delegates

AIMS

To promote an understanding of this specialist form of contract.

COVERS

- Project procurement
- Technical, commercial and contractual basis
- Tender process
- Risk identification

INSOLVENCY LAW

STM26

Duration 6 hours (one day)
Maximum 25 delegates

AIMS

To promote an understanding of insolvency law and to highlight the vulnerability of employers, contractors and subcontractors when insolvency occurs.

COVERS

- Effect of insolvency on contracts
- Security for performance
- Reviewable transactions
- Management of risk

INTERNATIONAL CONDITIONS OF CONTRACT

STM27

Duration 6 hours (one day)

AIMS

To give delegates an introduction to the different 1999 FIDIC forms. To provide an overview of the Red, Yellow and Silver books. To look at the provisions in respect of progress meetings, programming, claims and disputes.

COVERS

- Background to FIDIC and three books
- Overview
- General provisions
- Progress
- Claims
- Disputes

STANDARD FORMS OF SUBCONTRACT

STM28

Duration 4 hours (half day)
Maximum 15 delegates

AIMS

To give early career civil engineers and quantity surveyors an introduction to civil engineering and NEC subcontracts.

COVERS

- The nature and scope of subcontracting
- Overview of the standard forms
- Subcontractors and the law
- Subcontract management under the standard forms
- Typical issues in subcontracting

A REINTRODUCTION TO MEASUREMENT (CIVIL OR BUILDING OPTION)

MENTORING

AN INTRODUCTION TO CONSTRUCTION TECHNOLOGY FOR NON- COGNATE SURVEYORS

STM29

Duration 12 hours (two day)
Maximum 10 delegates

AIMS

To provide an insight into the philosophy behind quantities generated by reference to the civil engineering or building standard method of measurement. To promote a familiarisation associated to the basic principles of taking-off, recording of dimensions and the preparation of quantities.

COVERS

- Definitions of standard terminology associated with excavation works
- The weighting technique for the assessment of average ground levels
- Interpolation of cut and fill lines
- Centreline girths
- Entries to dimension paper
- The development of standard method of measurement descriptions for excavation, filling, in situ concrete, formwork, roads and pavings

STM30

Duration 4 hours (half day)
Optional extra 2 hours (one day)
Maximum 15 delegates

AIMS

Mentoring is an important part of the ICES professional development philosophy. This module defines the objects of mentoring and serves as an introduction to the mentoring process for companies with development schemes.

COVERS

- What is a mentor?
- What is mentoring?
- Characteristics of a good mentor
- What's in it for the mentee?
- What does the mentor do?
- Some common problems

STM31

Duration 6 hours (one day)
Maximum 20 delegates

AIMS

To give those who have changed career direction an insight into basic construction technology issues, on the basis that they may never take formal tuition in essential basic material as they adapt to their new workplace role. This provides essential information on loads and stresses, material performance, fundamental cost issues and an overview of the construction process.

COVERS

- The function of buildings
- Loads and stresses to be carried
- Building styles
- Shape and cost
- Design and buildability
- Extending structural capability
- Preliminary site work
- The construction process

AN INTRODUCTION TO QUANTITY SURVEYING

AN INTRODUCTION TO CONSTRUCTION TECHNOLOGY AND CIVIL ENGINEERING MEASUREMENT

STM32

Duration 12 hours (two day)
Maximum 10 delegates

AIMS

To provide an insight into the philosophy behind quantities generated by reference to the civil engineering and building standard methods of measurement. To promote a familiarisation associated to the principles of taking-off, recording dimensions and the presentation of bills of quantities.

COVERS

- Underlying philosophy and development of standard methods of measurement.
- Definitions of standard terminology associated with excavation works.
- The weighted technique for the assessment of average ground levels.
- Interpolation of cut and fill lines.
- Centreline girths.
- Entries to dimension paper.
- Taking off quantities from purposely designed drawings.
- Billing measured items.

STM33

Duration 12 hours (two day)
Maximum 12 delegates

AIMS

To give those who have changed career direction an insight into basic construction technology. To provide essential information on loads, stresses, material performance, cost issues and an overview of the construction process. To provide an insight into quantities generated by reference to the civil engineering standard method of measurement.

COVERS

- The functions of buildings.
- Building styles, shape and cost.
- Loads, stresses, design and buildability.
- Extending structural capability.
- Preliminary site work and the construction process.
- Excavation terminology.
- Girth calculations for trenches and walls
- Measurement of a specially designed structure (supported by 3D and walkthrough computer graphics).
- Billing of measured quantities.



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