

Course Overview

This course provides a thorough practical, in-depth and broad perspective of estimating in the engineering and construction industry. The course emphasises how the role is linked to all activities company wide. The different perspectives of primary stakeholders such as contractors, clients, and consulting services are all considered. Recommended Practice from the AACEI (Association for the Advancement of Cost Engineering International) are combined with practical case studies, including a Waste to Energy Plant, group activities, exercises, discussion, and quizzes. By completing the course, delegates acquire and consolidate a breadth of knowledge and skills related to both the technical and inter-personal abilities needed to prepare and understand an estimate.

Course Style

Course style is virtual instructor led. Delegates are provided with access to the GO FORTH Microsoft Teams environment that is specially configured for enhanced collaboration. The rich and high-quality interactive virtual learning workspace helps replicate the physical classroom environment, whilst providing all the advantages of a structured virtual learning environment

Course Duration

5 x 4 ½ hour virtual days (9.00am to 1.30pm) = **22 ½ hours**

Course Content

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| <ul style="list-style-type: none"> ▪ What is an estimate? ▪ Estimate purpose. ▪ Classes and types of estimates. ▪ Methodologies - parametric, analogous, bottom up, expert opinion. ▪ Cost of preparing estimates ▪ Accuracy levels, reliability and precision ▪ Direct, indirect and other costs. ▪ Allowances, contingency, overhead and profit ▪ Learning curves ▪ Data analysis ▪ Factored estimates - in depth data and techniques ▪ Work and Cost Breakdown Structures ▪ Methods of measurement ▪ Estimating IT Systems and in-house databases ▪ Quantifying and costing the scope of work | <ul style="list-style-type: none"> ▪ Location factors, labour productivity and staff rates ▪ Currency conversion ▪ Subcontract quotation analysis, ▪ Services estimates ▪ Risk assessment ▪ Optimism bias ▪ Estimating strategy ▪ Basis of Estimate and change control. ▪ Escalation and inflation ▪ Time and the value of money ▪ Cash flow and forecasts. ▪ Whole Life Costing NPV, IRR, WLC and LCC ▪ Benchmarking ▪ Estimating review, assurance and audits ▪ Ethics, confidentiality and duty of care ▪ Communication, conflict resolution, effective working relationships and team building |
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Who Should Attend?

Those new to estimating and those with experience that require a broader perspective. Also beneficial to staff in other roles (project management, discipline engineers, recent graduates) that require a working knowledge of estimating.

Learning Objectives

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| <ul style="list-style-type: none"> ▪ Contribute to the preparation of estimates of all classes. ▪ Produce a cash flow for an estimate. ▪ Describe the methodology for whole life costing. ▪ Appreciate the IT systems used to produce an estimate. ▪ Operate an estimate documentation and version control system. | <ul style="list-style-type: none"> ▪ Apply scaling factors to estimates such as size and location. ▪ Understand the principles involved in the production of economic evaluations using NPV and other methodologies. ▪ Work effectively in a team producing an estimate. ▪ Recognise issues of ethical concern ▪ Reflect upon performance and produce a personal development plan |
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ECITB grant support may be available to member companies, please contact your account manager to discuss your requirements.

To arrange a course or placement or find out more

Email shane.forth@goforth.org.uk, call +44(0)7411 595250 or visit us at www.goforth.org.uk