



# PM020:

# Certified Cost Engineering: Effective Estimating and Cost Control of Technical Projects



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# **Training Description:**

The Certified Cost Engineering training course will equip participants with the skill and knowledge to control costs in their projects. They will learn the basics of cost estimating, cost control and planning. It is recognized that improving cost engineering capabilities within the industry contributes to the development of affordable products and technologies.

There is growing demand at local, national and international levels to impart cost and affordability engineering knowledge to support organizations that seek high quality cost engineers.

This intensive training course is in alignment with the American Association of Cost Engineers Standard. This program will provide participants with a thorough background in the concepts of total cost management and cost engineering. The training course addresses area of Total Cost Management through planning and controlling resources, costs, profitability and risk. i.e managing cost throughout the life cycle of any enterprise, program, facility, project, product or service. The training course covers the application of cost engineering and cost management principles, proven methodologies and the latest technology in support of the management process. **Practical sessions will provide hands-on experience.** 

# **Training Objectives:**

#### By the end of the training, participants will be able to:

- ✓ Understand the business context, the project life cycle and the purpose of cost engineering
- ✓ Be familiar with "Skills and Knowledge of Cost Engineering"
- ✓ Learn comprehensive tools & techniques in Cost Estimating and Control
- ✓ Improve your project management skills: Effective Planning and Scheduling
- ✓ Manage uncertainty in your project through an effective Risk Management Plan
- ✓ Be familiar with Contract Management
- ✓ Gain an in-depth knowledge in Total Cost Management framework
- ✓ performance and to provide accurate cost and schedule forecasting at project completion

# Personal Impact:

- ✓ Learn how to prepare professional proposals, value engineering ideas, claims or budgets
- ✓ Learn methodologies and tools for effective estimating, budgeting, cost control and value engineering
- ✓ Practice of standardized methods, procedures, knowledgebase and checklist
- ✓ Obtain knowledge on project control implementation, monitoring and evaluation tools
- ✓ Learn techniques that ensures survival in a competitive market
- ✓ Ability to provide a means to bridge the gap from the theory to real life Implementation.
- ✓ Perform Value Analysis on your projects
- ✓ Creation of fully cost and resource loaded schedules
- ✓ Understanding Activity Based Costing (ABC) and Activity Based Management (ABM)

#### Organisational Impact:

- ✓ Competency Building in existing employees
- ✓ Competency building where existing employees is promoted.
- ✓ Good Management Practices
- ✓ Organizations' Strategic Objectives
- ✓ Understanding relevant needs of the stakeholders and clients



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- ✓ Understanding opportunities to Exceed Stakeholder/ Customer Expectations
- ✓ Competency by employees to exercise Technical Knowledge, Skills and Competencies

# Training Designed for:

This course is intended for professionals in all business enterprises including but not limited to Project Managers, Finance Managers, Human Resource Personals, Accountant, Engineers, Planners, Cost Engineers, Cost Controlling Engineers and Quantity Surveyors.

# **Training Requirement:**

"<u>Hand's on practical sessions, equipment</u> and <u>software will be applied during the course</u> if required and as per the client's request."

This training course is available upon request in English or Arabic, virtual online live or face to face public/inhouse. Content, location and duration can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

# **Training Program:**

#### **FIVE DAYS:**

- Introduction
- ❖ Module 1: COST
  - Cost Elements
  - Pricing
  - Materials
  - Labour
  - Engineering
  - Equipments, Parts, and Tools
  - Economic costs
  - Activity Based Cost Management

#### ❖ Module 2: COST ESTIMATING

- Collect Requirements
- Define Scope
- Create WBS
- Verify Scope and, Control Scope

#### Module 3: PLANNING & SCHEDULING

- Planning
- Scheduling

#### Module 4: PROGRESS & COST CONTROL (EARNED VALUE MANAGEMENT)

- Estimate Costs
- Determine Budget and Control Costs

#### ❖ Module 5: PROJECT MANAGEMENT

- Project Management
- Project organization Structure
- Project Planning



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- Project Labour cost control
- Leadership and Management of Project People
- Quality Management
- Value Analysis
- Contracting for Capital Projects
- Strategic Asset Management

#### ❖ Module 6: ENGINEERING ECONOMICS

- Basic Engineering Economics
- Applied Engineering Economics

#### ❖ Module 7: STATISTICS, PROBABILITY & RISK

- Statistics & Probability
- Basic Concepts in Descriptive Statistics
- Risk Management
- Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

# Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

# Training Certificate(s):

Internationally recognized certificate(s) will be issued to each participant who completed the course.

## **Training Fees:**

As per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01<sup>st</sup> of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

# **Training Timings:**

#### **Daily Timings:**

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:30	Recess (Prayer Break & Lunch)
13:30 - 15:00	Last Session



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## For training registrations or in-house enquiries, please contact:

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