معهد المورد للتدريب
AL MAWRED TRAINING INSTITUTE

Certified Cost Professional

Day 1: Introduction to Cost Engineering & Estimating

Objective: Establish a strong foundation in the principles of cost engineering and cost estimation.

Session 1: Overview of Cost Engineering

AACE International and CCP certification overview

Domains of cost engineering

Role and responsibilities of a cost professional

Session 2: Cost Estimating Fundamentals

Types of cost estimates (order of magnitude, definitive, etc.)

Estimating methodologies: parametric, bottom-up, analogous

Work Breakdown Structure (WBS) in estimating

Session 3: Estimating Process and Tools

Estimate planning, data collection, and risk assessment

Cost databases and software tools

Cost estimate documentation and review

Day 2: Project Planning, Scheduling & Controls

Objective: Learn essential planning and scheduling tools and integrate them into cost control practices.

Session 1: Project Planning Essentials

Project lifecycle and planning process

Scope, time, and cost integration

Planning deliverables and sequencing

Session 2: Project Scheduling Techniques

Critical Path Method (CPM), PERT, and Gantt Charts

Resource loading and leveling

Schedule risk and variance analysis

Session 3: Project Controls and Earned Value Management (EVM)

EVM metrics: PV, EV, AC, CPI, SPI

Variance analysis and forecasting

Integration of cost and schedule control

Day 3: Cost Control, Budgeting & Forecasting

Objective: Understand cost control processes and learn forecasting and budget management techniques.

Session 1: Cost Control Principles

Cost baseline and control accounts

Monitoring, tracking, and reporting cost performance

Cost change control and trend analysis

Session 2: Budgeting and Resource Planning

Developing cost budgets and cash flows

Labor and non-labor resource planning

Cost-loaded schedules and time-phased budgeting

Session 3: Forecasting Techniques

Estimate at Completion (EAC) and Estimate to Complete (ETC)

Predictive analytics in project cost control

Corrective action planning

Day 4: Cost Management, Economic Analysis & Risk

Objective: Learn financial and economic evaluation of projects and how to manage associated risks.

Session 1: Life Cycle Costing and Value Engineering

Total cost of ownership (TCO)

Value analysis and cost-benefit analysis

Cost optimization strategies

Session 2: Economic and Financial Analysis

Net Present Value (NPV), Internal Rate of Return (IRR), ROI

Inflation, depreciation, and taxes in project evaluation

Sensitivity and break-even analysis

Session 3: Risk Management in Cost Engineering

Risk identification, analysis, and response planning

Quantitative risk analysis (Monte Carlo, decision trees)

Integrating risk into estimating and planning