



AACE International Certified Cost Professional Study Course

This course is designed to provide comprehensive coverage of the skills and knowledge that are required in order to successfully obtain the AACE International Certified Cost Professional accreditation. The course is based on the AACE International Total Cost Management Framework, and is organized to align with AACE International Recommended Practice 11R-88 Required Skills and Knowledge of Cost Engineering.

The course is equally beneficial to those attendees that simply want to obtain a general understanding of all the various skills of cost engineering: business and program planning; cost estimating; project planning and scheduling; economic decision making and risk analysis; project management; and project cost and schedule performance measurement and control. The course combines lecture and sample problem solving.

Day 1

Day 1 provides an overview of the supporting skills and knowledge required by those employed in total cost management and cost engineering roles. An overview of the AACE International Framework is provided that will ensure understanding the both the Strategic Asset Management Process, as well as the Project Control Process.

) Introduction

) Supporting Skills and Knowledge

- Elements of Cost
 - Cost
 - Cost Dimensions
 - Cost Classifications
 - Cost Types
 - Pricing
- Elements of Analysis
 - Statistics and Probability
 - Economic and Financial Analysis
 - Optimization and Models
 - Physical Measurement
- Enabling Knowledge
 - Enterprise in Society
 - People and Organizations in Enterprises
 - Information Management
 - Quality Management
 - Value Management
 - Environmental, Health, Safety, and Security



) **Process and Functional Skills and Knowledge**

- Total Cost Management (TCM) Framework
 - Overall TCM Process and Terminology
 - Strategic Asset Management Process
 - Project Control Process

Day 2

Day 2 begins with discussing many of the cost engineering planning processes including the translation of business objectives and requirements into project scope and strategies. Most of this day will focus on project schedule planning, development and control; as well as resource management issues.

) **Process and Functional Skills and Knowledge**

- Planning
 - Requirements Elicitation and Analysis
 - Scope and Execution Strategy Development
 - Schedule Planning and Development
 -) Schedule Planning
 -) Schedule Development
 -) Schedule Control Basis
 -) Other Scheduling Concepts
 - Resource Management

Day 3

Day 3 discusses cost estimating and budgeting, and will cover several estimating preparation methodologies. The course continues with coverage of value analysis and engineering, and risk management.

) **Process and Functional Skills and Knowledge**

- Planning
 - Cost Estimating and Budgeting
 -) General Estimating Concepts
 -) Estimating Processes and Practices
 -) Other Estimating Issues
 -) Other Estimating Concepts
 - Value Analysis and Engineering
 - Risk Management



Day 4

Day 4 completes coverage of planning processes with discussions on procurement and contract management, and investment decision making. The implementation of all of the planning processes to support project control will be covered; as well as the concepts required for performance measurement.

) Process and Functional Skills and Knowledge

- Planning
 - Procurement and Contract Management
 - Investment Decision Making
 -) General Concepts
 -) Decision Making
- Plan Implementation
 - Project Implementation
 - Project Control Implementation
 - Plan Validation
- Performance Measurement
 - Cost Accounting
 - Project Performance Measurement
 - Asset Performance Measurement

Day 5

Day 5 is focused on performance assessment. Based on information obtained from performance measurement, the determination of actual performance against baseline plans will be addressed, as well as forecasting end of project cost and schedule results. Change management will be covered in relation to reacting to project performance. Historical information management to improve project results will be covered, as well as skills for forensic performance assessment. Finally, an overview of the certification exam structure will be provided.

) Process and Functional Skills and Knowledge

- Performance Assessment
 - Project Performance Assessment
 - Asset Performance Assessment
 - Forecasting
 - Project Change Management
 - Asset Change (Configuration) Management
 - Historical Database Management
 - Forensic Performance Assessment

) Exam Overview and Structure