



Total Cost Management

The identification and evaluation of capital investment options, development of capital project scope, and project execution should all be part of an integrated process for an owner company. This process is called Total Cost Management (TCM) by AACE International. This course will cover the following TCM elements: development and evaluation of capital project investment options; investment risk analysis and decision making; the development of project scope and project execution plans that focus on cost estimate and schedule development; cost/schedule control of projects during execution; and closing the process loop through asset and project knowledge management.

Day 1

Day 1 provides an overview of the AACE International Total Cost Management Framework. The course begins with describing two process lifecycles: 1) Strategic Asset Management; and 2) Project Control. This leads to discussion of the identification and development of potential project investment options, and the subsequent process of investment decision making that adequately addresses risk. The Phase-Gate processes and systems typically used in capital project development is addressed; along with a discussion of the importance of effective value improving practices. Issues with TCM knowledge management are addressed, as well as appropriate organization and leadership issues to maximize effective application of TCM principles.

-) TCM Process Overview**
-) Strategic Asset Management and Project Control**
-) Asset and Project Life Cycles, Portfolios, and Programs**
-) Identification and Development of Project Investment Options**
-) Risk Analysis and Decision Making for Project Investment Options**
-) Capital Project Development Process (Phase-Gate Systems)**
-) Overview of Value Improving Practices**
-) TCM Knowledge Management**
-) Organization and Leadership for TCM**



Day 2

Day 2 begins with discussion of the importance of effectively establishing and communication the goals and objectives of the potential investment decision. The balance of the day's discussions will focus on project planning – both from a cost and schedule perspective. The importance of effective cost/schedule integration will be addressed; along with ensuring quality throughout the project planning process.

-) Establishing and Communicating Goals and Objectives**
-) Project Planning Overview**
-) Project Planning – Cost Estimating**
 - Estimate Classification
 - Structuring the Estimate
 - Estimating Methodologies
 - Estimating Uncertainty
 - Documenting the Estimate
-) Project Planning – Scheduling**
 - Schedule Classification
 - Structuring the Schedule
 - Schedule Development
 - Scheduling Uncertainty
 - Documenting the Schedule
-) Cost/Schedule Integration and Risk Evaluation**
-) Project Planning - Quality Management**
 - Review and Validation
 - Process Improvement



Day 3

Day 3 begins with a discussion on establishing control baselines against which project investment performance will be measured and assessed. The initiation of project control processes and systems to be used during project execution is addressed. The measurement of physical progress to aid in the determination and assessment of performance indicators is discussed. The management of change is addressed leading to discussion of effective cost and schedule forecasting. Issues with project recovery are also addressed. The topic of project close-out is discussed, with a focus on closing the project loop in regards to the collection and analysis of project historical information. Finally, ways in which to evaluate organizational TCM competency in order to close potential gaps and drive investment performance are presented.

-) Establishing Control Baselines**
-) Initiating Control Processes and Systems**
-) Measuring Progress and Performance**
-) Assessing Performance**
-) Change Management**
-) Cost and Schedule Forecasting**
-) Project Recovery**
-) Project Close-Out and Closing the Project Loop**
-) Evaluating Organizational TCM Competency**