





Course: Effective Project Analysis: Tools, Methods and Strategies for Managing Risk

Code	City	Hotel	Start	End	Price	Language - Hours
GRC-859	Beirut (Lebanon)	Hotel Meeting Room	2026-11-23	2026-11-27	2550 €	En - 25

Course Introduction

Large-scale capital-intensive projects require substantial investments and carry significant financial risks. This training course equips professionals with the knowledge and tools to manage organizational investments, assess project financial viability, and develop risk mitigation strategies. Participants will gain insights into project decision analysis, financial modeling, risk assessment, and capital management to maximize returns and ensure long-term project success.

This course provides a structured approach to evaluating risks and uncertainties, utilizing decision-making tools to determine investment feasibility. By applying systematic cash-flow analysis, sensitivity assessments, and return-on-investment (ROI) evaluations, participants will be able to drive informed financial decisions, mitigating risks associated with project investments.

Course Objectives

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

- Understand how to manage large capital-intensive project investments.
- Apply financial decision-making techniques and effectively present findings to stakeholders.
- Analyze cash flow, assess financial risks, and implement mitigation strategies.
- Conduct comprehensive cash-flow and sensitivity analyses to forecast project



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- Define and manage project success factors to maximize return on capital investments.
- Develop financial strategies that integrate with risk mitigation frameworks.

Who Should Attend?

- Program & Project Management Professionals
- Project Leaders & Engineers
- Cost Engineers & Financial Analysts
- Senior Project Control & Business Services Professionals
- Investment & Portfolio Managers

Course Outline

Day 1: Fundamentals of Project Decision Analysis

- Understanding project management decision-making frameworks.
- Developing and evaluating a project business case.
- Importance of systematic risk management in project decision-making.
- Assessing project risk and uncertainty.
- Decision analysis techniques, including option analysis.
- Identifying key financial decision-making factors.
- Fundamentals of engineering economics and financial projections.
- Time value of money and discounted cash flow methods.

Day 2: Cash Flow Modeling & Financial Risk Analysis

- Financial modeling for project evaluation.
- Internal Rate of Return (IRR) computations and implications.
- Evaluating risk factors affecting IRR.



- Understanding stakeholder influence on financial decisions.
- Capturing project requirements and defining scope of work.
- Developing financial strategies to manage project funding.

Day 3: Cost of Capital & Risk Prioritization

- Differentiating between capital & operational expenditures (CAPEX/OPEX).
- Estimating project cost of capital.
- Benefit-Cost Ratio (BCR) and financial risk assessment.
- Understanding sunk costs, opportunity costs, and salvage values.
- Forecasting financial risk impacts and probabilities.
- Determining financial risk priorities and strategic responses.
- Managing corporate cash flow requirements for capital projects.

Day 4: Decision Analysis & Risk Mitigation Strategies

- Expected value concept in financial decision-making.
- Fundamental probability and risk analysis concepts.
- Identifying mutually exclusive and independent project risks.
- Conducting qualitative and quantitative project risk analysis.
- Applying semi-quantitative Bow-Tie risk assessment techniques.
- Detailed risk qualification and prioritization methodologies.
- Using scenario planning, sensitivity analysis, and simulation models.
- Tornado diagrams and PERT analysis for risk visualization.

Day 5: Decision Trees, ROI Analysis & Strategic Risk Responses

- Decision tree analysis and strategic project decision-making.
- Developing and solving decision trees for financial risk evaluation.
- Implementing risk response strategies and evaluating response effectiveness.
- Understanding and computing Return on Investment (ROI).
- Identifying financial and strategic ROI factors.
- Evaluating project options and presenting financial recommendations.



The Scandinavian Academy for Training and Development adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training and Development.

Program Timings:

- 9:00 AM to 2:00 PM in Arab cities.
- 10:00 AM to 3:00 PM in European and Asian cities.

The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.