





Course: ADVANCED CAPITAL PROJECT EVALUATION & DECISION MAKING

Code	City	hotel	Start	End	price	Language - Hours
718	Al Baha	Hotel Meeting	2025-11-16	2025-11-20	12450 SR	En - 25

Course Description:

This 5-day course covers advanced capital project evaluation and decision making techniques used to optimize the development and operation of projects specially mining, petroleum and non-natural resource production and processing operations. It demonstrates advanced evaluation techniques presented using a variety of applications for people with technical and non-technical backgrounds, with previous evaluation experience.

Course Goal

To enhance the participant's knowledge, skills, and abilities necessary understand and employ advanced capital project evaluation and decision making techniques.

Course Objectives

By the end of this course the participant will be able to:

- Be familiar with present, future and annual value calculations and the application of these concepts.
- Be familiar the calculation of Rate of Return (ROR), Growth Rate of Return (GROR), Net Present Value (NPV) and Ratio Analyses for "income-producing" and "service- producing" investments.
- Understand the applications of present, future and annual value, rate of return and



break-even concepts applied to the analysis of "income-producing" alternatives, including the differences between "mutually exclusive" and "non-mutually exclusive" alternative analyses.

- Introduce inflation and escalation definitions and applications to escalated and constant-dollar analysis of investments.
- Understand escalated, constant and today's dollar analyses.
- Be familiar with "sensitivity" analysis and "risk adjusted" evaluations based on using expected value analysis concepts to build finite probability of success and failure into evaluations.
- Understand depreciation, depletion and amortization tax deductions for valid after-tax analysis of projects.
- Be familiar with the details of calculating after-tax rate of return (DCFROR), NPV and ratios for varying investment situations.
- Handle after-tax break-even calculations in escalated or constant dollars and the relationship of operating cost savings to income and cash flow.
- Understand sunk costs and opportunity costs in income-producing and break-even analyses.
- Be familiar with international analysis considerations that differ from domestic evaluations.
- Relate after-tax NPV results to the before-tax value of projects and investments.
- Understand the proper handling of sunk costs and opportunity costs.
- Be familiar with leveraged (borrowed money) project analyses.

Who Can Benefit?

has been Organized for managers, engineers, geologists, landmen, scientists, accountants and others concerned with evaluating investments, this course relates to the economic analysis of income producing and service producing investments using discounted cash flow analysis criteria and procedures.



Course Outline

- Present, Future and Annual Value Calculations and the Application of These Concepts.
- Rate of Return (ROR), Growth Rate of Return (GROR), Net Present Value (NPV) and Ratio Analyses for "Income-Producing" and "Service-Producing" Investments.
- The Applications of Present, Future and Annual Value, Rate of Return and Break-Even Concepts Applied to the Analysis of "Income-Producing" Alternatives,
- Differences between "Mutually Exclusive" and "Non-Mutually Exclusive" Alternative Analyses.
- Inflation and Escalation Definitions and Applications to Escalated and Constant-Dollar Analysis of Investments.
- Escalated, Constant and Today's Dollar Analyses.
- Become Familiar With "Sensitivity" Analysis And "Risk Adjusted" Evaluations Based On Using Expected Value Analysis Concepts To Build Finite Probability Of Success And Failure Into Evaluations.
- Achieve Understanding Of Depreciation, Depletion And Amortization Tax Deductions For Valid After-Tax Analysis Of Projects.
- After-Tax Rate of Return (DCFROR), NPV And Ratios for Varying Investment Situations.
- After-Tax Break-Even and Escalated or Constant Dollars
- The Relationship of Operating Cost Savings to Income and Cash Flow.
- Sunk Costs and Opportunity Costs and Income-Producing and Break-Even Analyses.
- International Analysis Considerations and the Domestic Evaluations.
- After-Tax Cost Analysis and Incremental DCFROR, NPV and Ratio Analysis for Evaluating Replacement Alternatives and Leasing Versus Purchasing Decisions.
- Leveraged (Borrowed Money) Project Analyses.



The Scandinavian Academy for Training Center 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 Center.

Program Timings:

- 9:00 AM to 2:00 PM

The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.
- A closing ceremony on the final day to distribute certificates and celebrate participants achievements.