



Project Management



SCANDINAVIAN ACADEMY
Training and Development



Course: ADVANCED CAPITAL PROJECT EVALUATION & DECISION MAKING

Code	City	hotel	Start	End	price	Hours
718	Barcelona (Spain)	Hotel Meeting Room	2024-07-01	2024-07-05	5450 €	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 (DCFRROR), 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.

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 (DCFRROR), 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 DCFRROR, NPV and Ratio Analysis for Evaluating Replacement Alternatives and Leasing Versus Purchasing Decisions.
- 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.



The Scandinavian Academy employs modern methods in training and skills development, enhancing the efficiency of human resource development. We follow these practices:

- **Theoretical Lectures:**
 - We deliver knowledge through advanced presentations such as PowerPoint and visual materials, including videos and short films.
- **Scientific Assessment:**
 - We evaluate trainees skills before and after the course to ensure their progress.
- **Brainstorming and Interaction:**
 - We encourage active participation through brainstorming sessions and applying concepts through role play.
- **Practical Cases:**
 - We provide practical cases that align with the scientific content and the participants specific needs.
- **Examinations:**
 - Tests are conducted at the end of the program to assess knowledge retention.
- **Educational Materials:**
 - We provide both printed and digital scientific and practical materials to participants.
- **Attendance and Final Result Reports:**
 - We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.
- **Professionals and Experts:**
 - The programs scientific content is prepared by the best professors and trainers in various fields.
- **Professional Completion Certificate:**
 - Participants receive a professional completion certificate issued by the Scandinavian Academy for Training and Development in the Kingdom of Sweden, with the option for international authentication.
- **Program Timings:**
 - Training programs are held from 10:00 AM to 2:00 PM and include buffet sessions for light meals during lectures.