

€ TRAINING

Economic and Technical Project Evaluation





Economic and Technical Project Evaluation

Introduction:

This training program provides participants with the essential skills and knowledge to conduct thorough economic and technical evaluations for engineering and maintenance projects. It empowers them to make informed decisions that enhance project success.

Program Objectives:

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

- Understand the principles of economic and technical evaluations in engineering and maintenance projects.
- Gain proficiency in cost estimation and financial analysis.
- Learn techniques for technical feasibility assessment.
- Develop skills in risk analysis and management.
- Implement best practices for project evaluation and decision-making.

Target Audience:

- Project managers and engineers.
- Maintenance managers and reliability engineers.
- Financial analysts and cost estimators.
- Operations managers and technical consultants.
- Professionals involved in project planning and evaluation.

Program Outline:

Unit 1:

Fundamentals of Economic Evaluation:

- Introduction to Economic Evaluation in Projects.
- Key Concepts: Time Value of Money, Net Present Value NPV, Internal Rate of Return IRR.
- Cost Estimation Techniques and Approaches.

- Cash Flow Analysis and Financial Metrics.
- Economic Feasibility Studies and Reporting.

Unit 2:

Technical Evaluation and Feasibility:

- Introduction to Technical Evaluation in Engineering Projects.
- Assessing Technical Feasibility: Methodologies and Criteria.
- Engineering Design and Specification Review.
- Evaluating Technical Risks and Mitigation Strategies.
- Case Studies on Technical Feasibility Assessments.

Unit 3:

Cost-Benefit Analysis and Financial Modeling:

- Principles of Cost-Benefit Analysis.
- Developing Financial Models for Project Evaluation.
- Sensitivity Analysis and Scenario Planning.
- Comparative Analysis of Project Alternatives.
- Tools and Software for Financial Modeling.

Unit 4:

Risk Analysis and Management:

- Identifying and Assessing Project Risks.
- Qualitative and Quantitative Risk Analysis Techniques.
- Risk Mitigation and Management Strategies.
- Integrating Risk Analysis into Project Evaluation.
- Practical Examples and Case Studies.

Unit 5:

Best Practices and Advanced Topics:

- Best Practices in Economic and Technical Evaluations.
- Performance Metrics and Benchmarking.
- Continuous Improvement in Project Evaluation.
- Emerging Trends and Innovations in Project Evaluation.
- Implementing Evaluation Findings in Project Decision-Making.