

Course Overview:

This advanced course is tailored for engineers and technical professionals, focusing on sharpening their problem-solving and decision-making skills in complex maintenance and engineering environments. By leveraging analytical thinking and structured methodologies, participants will gain the ability to resolve critical issues more efficiently and support organizational goals with confidence.

Course Objective:

- Apply systematic approaches to solve complex engineering problems
- Enhance critical and analytical thinking capabilities
- Improve decision-making speed and accuracy under technical constraints
- Utilize creative thinking to generate innovative engineering solutions
- Strengthen communication and collaboration in technical teams

Course Outline:**Module 1: Advanced Problem-Solving Techniques**

- Systematic approach to problem solving
- Complex problem analysis
- Developing effective technical solutions

Module 2: Decision-Making in Technical Environments

- Technical decision-making models and frameworks
- Evaluating risks and options
- Ethical and practical considerations

Module 3: Analytical Thinking for Engineers

- Data analysis and interpretation
- Applying critical thinking in engineering
- Quantitative and qualitative methods

Module 4: Creative Thinking in Technical Problem Solving

- Techniques for fostering innovation
- Developing creative solutions
- Encouraging team-based creativity

Module 5: Communication and Collaboration

- Effective communication in technical settings
- Team dynamics in problem-solving
- Presenting technical decisions

Module 6: Strategic Planning and Implementation

- Strategic thinking in engineering projects
- Implementing technical solutions
- Monitoring outcomes and feedback

Module 7: Case Studies and Real-World Applications

- Engineering case study analysis
- Applying theories to practical scenarios
- Learning from industry examples

Module 8: Interactive Workshops and Simulation

- Simulation of real-world engineering problems
- Group problem-solving workshops

Training Language:

English-Arabic

Training Methodology:

The course combines various teaching methods, including instructor-led presentations, group discussions, case study analyses, and assessments through quizzes and a final exam to engage participants and ensure they understand and retain the material.

Venue | Date | Fees

Khobar | 17-08-2025 | 14,375 SAR

Riyadh | 05-10-2025 | 17,250 SAR

-Skills reinforcement through active participation

Who Should Attend:

- Engineers
- Technical Managers
- Maintenance and Reliability Professionals
- Project and Design Engineers