

Introduction to TRIZ

Rapid innovative problem solving

Overview

TRIZ (the Theory of Inventive Problem Solving) was created by engineers, for engineers. TRIZ is a proven process for solving problems, generating new ideas and developing systems quickly, cheaply and inventively. The TRIZ process offers a rigorous and systematic approach for understanding and solving any problem; its principal tools enable you to uncover the most effective route to practical solutions.

TRIZ includes concept lists distilled from analysis of all known engineering success, making TRIZ a unique tool to find solutions to any given problem – including both technical and management issues – without having to rely on the spontaneous creativity of individuals.

Who should attend?

- Any engineer from senior management to undergraduate
- Design and Systems Engineers
- R & D personnel, researchers and training managers
- Technical and process managers
- Business managers and engineering managers

Topics Covered:

Introduction to TRIZ and the Fundamentals of Systematic, Practical, Innovative Effective Problem Solving

- An overview of TRIZ – its origins and applications
- How TRIZ has been used to solve real problems – case studies and examples
- Simple creativity exercises to help you to use your brain and experiences more effectively
- An introduction to the TRIZ toolkit and process – you learn four TRIZ tools during this workshop

Contradictions

- Learn how to identify and solve contradictions to find powerful solutions to your problems with the 40 Inventive Principles
- An exercise on the 40 Inventive Principles and how they can be used to find ingenious and robust solutions

8 Trends of Evolution and next-generation products

- How to predict technological advances
- Using TRIZ Trends to perfect products
- An exercise on the future development of products

Resources

- Learn how to systematically get what we want with the resources we already have

- An exercise on clever use of resources

Thinking in Time and Scale

- The most powerful TRIZ tool (and also the most simple)
- Understanding the context and history of your problem
- Mapping the places where the problem can be solved
- Using Time and Scale to identify many solutions to problems

Benefits of attending:

As a result of attending this session, you will be able to:

- 'Think TRIZ' and become systematically creative: Work harder ,smarter and faster with TRIZ
- Use your own knowledge and experience effectively
- Understand problems more clearly
- See fast routes to solving problems

Who delivers the course?

The IET work in partnership with Oxford Creativity to deliver this one day workshop. Oxford Creativity has been teaching TRIZ to engineers for over 10 years, and are the leading TRIZ training provider in Europe. Their 1 Day TRIZ Workshop offers a fast paced introduction to TRIZ and hands on experience of the most commonly used TRIZ tools: the 40 Inventive Principles, the Trends of Technical Evolution, Resources and Thinking in Time and Scale.