

TRIZ | Theory of Inventive Problem Solving

Cape Town (South Africa) 19 - 23 January 2026



www.blackbird-training.com -



TRIZ I Theory of Inventive Problem Solving

Code: OC28 From: 19 - 23 January 2026 City: Cape Town (South Africa) Fees: 4000 Pound

Introduction

TRIZ Theory of Inventive Problem Solving is a powerful methodology for systematic innovation and inventive problem-solving, developed from the analysis of over 2 million patents. This TRIZ training course introduces you to TRIZ tools and techniques that help solve both technical and non-technical problems creatively and efficiently. The program is designed to empower participants with the TRIZ methodology to overcome challenges and foster innovation across various fields, including engineering, business, and product design.

Course Objectives

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

- Understand the TRIZ method and its core principles.
- Use TRIZ tools to systematically solve real-world problems.
- Identify and eliminate contradictions in designs or business systems.
- Apply TRIZ principles in engineering, business, and innovation projects.
- Enhance idea quality and reduce time-to-innovation by leveraging TRIZ innovation principles.

Course Outlines

Day 1: Introduction to TRIZ & Systematic Innovation

- · History and Philosophy of TRIZ.
- Understanding TRIZ concepts and innovation patterns.
- Overview of TRIZ methodology and its applications.
- Comparison: TRIZ vs Traditional Problem-Solving Methods.
- Understanding Systems and the Ideal Final Result IFR.

Day 2: Contradictions & the 40 Inventive Principles

- Defining Technical & Physical Contradictions.
- Tools for Eliminating Contradictions.
- The 40 Inventive Principles Concepts & Real Examples.
- Contradiction Matrix How to Use It.
- Workshop: Applying Inventive Principles to Real Problems.

Day 3: Functional Analysis & Root Cause Analysis SFA, RCA

- Functional Analysis Identifying Useful & Harmful Functions.
- Trimming and Function Modeling.
- Root Cause Analysis Using TRIZ logic.
- Substance-Field Su-Field Modeling.





Case Study: Using SFA to Solve Technical Challenges.

Day 4: Patterns of Evolution & Inventive Standards

- Technology Evolution Trends in TRIZ.
- 9 Windows Tool Analyzing Time and Space Dimensions.
- Standard Solutions Inventive Standards.
- ARIZ Algorithm for Inventive Problem Solving Intro.
- Group Exercise: Using Patterns to Forecast System Evolution.

Day 5: Applying TRIZ in Practice

- Practical Application of TRIZ in Product Design, Manufacturing, and Services.
- Integrating TRIZ with Six Sigma, Lean, and Agile methodologies.
- Solving Business & Management Problems with TRIZ principles.
- Final Project: Solving a Real or Simulated Problem with TRIZ tools.
- Review, Feedback, and Certification.

Why Attend This Course: Wins & Losses!

- Learn TRIZ as an innovative methodology to solve problems systematically in both technical and nontechnical domains.
- Gain the ability to eliminate contradictions in systems or designs, enabling more creative solutions and innovations.
- Master the TRIZ theory of inventive problem solving to analyze root causes and address challenges at their core.
- Apply TRIZ innovation principles to engineering, business, and product development projects, accelerating innovation and reducing time to market.
- Develop skills in forecasting system evolution using TRIZ patterns, enhancing strategic planning and problem-solving.

Conclusion

This TRIZ training course provides a comprehensive understanding of the TRIZ methodology, enabling you to approach problems with a structured and inventive mindset. By leveraging TRIZ tools in product design, manufacturing, and business management, you will be able to address complex challenges efficiently and innovate effectively.

Enroll now to master the TRIZ theory of inventive problem solving and lead your projects towards breakthrough solutions.





Blackbird Training Cities

Europe



Malaga (Spain)



Sarajevo (Bosnia and Herzegovarsa)ais (Portugal)





Glasgow (Scotland)



Edinburgh (UK)



Oslo (Norway)



Annecy (France)



Bordeax (France)



Copenhagen (Denmark)



Birmingham (UK)



Lyon (France)



Moscow (Russia)



Stockholm (Sweden)



Podgorica (Montenegro)



Batumi (Georgia)



London (UK)



Istanbul (Turkey)



Amsterdam



Düsseldorf (Germany) (Switzerland)



Paris (France)



Athens(Greece)



Barcelona (Spain)



Munich (Germany)



Geneva



Prague (Czech)



Vienna (Austria)



Rome (Italy)



Brussels



Madrid (Spain)



Berlin (Germany)



Lisbon (Portugal)



Zurich



Manchester (UK)



Milan (Italy)





Blackbird Training Cities

USA & Canada



Los Angeles (USA)



Orlando, Florida (USA)



Online



Phoenix, Arizona (USA)



Houston, Texas (USA)



Boston, MA (USA)



Washington (USA)



Miami, Florida (USA)



New York City (USA)



Seattle, Washington (USA)



Washington DC (USA)



In House



Jersey, New Jersey (USA)



Toronto (Canada)

ASIA



Baku (Azerbaijan) (Thailand)



Maldives (Maldives)



Doha (Qatar)



Manila (Philippines)







Beijing (China)



Singapore (Singapore)



Sydney



Tokyo (Japan)



Jeddah (KSA)



Riyadh(KSA)



Melbourne (Australia) Korea)



Phuket (Thailand)



Dubai (UAE)



Kuala Lumpur (Malaysia)



Kuwait City (Kuwait)



Seoul (South



Pulau Ujong (Singapore)



Irbid (Jordan)



Jakarta (Indonesia)



Amman (Jordan)



Beirut





Blackbird Training Cities

AFRICA



Kigali (Rwanda)



Cape Town (South Africa)



Accra (Ghana)



Lagos (Nigeria)



Marrakesh (Morocco)



Nairobi (Kenya)



Zanzibar (Tanzania)



Tangier (Morocco)



Cairo (Egypt)



Sharm El-Sheikh (Egypt)



Casablanca (Morocco)



Tunis (Tunisia)





Blackbird Training Clients



MANNAI Trading
Company WLL,
Qatar



Alumina Corporation **Guinea**



Booking.com Netherlands



Oxfam GB International Organization, Yemen



Capital Markets Authority, **Kuwait**



ersmith Petromon Oil Limited
Nigeria

Oatar Nati





Qatar Foundation, **Qatar**



AFRICAN UNION ADVISORY BOARD ON CORRUPTION, Tanzania



KFAS **Kuwait**



Reserve Bank of Malawi, **Malawi**



Central Bank of Nigeria



Ministry of Interior, KSA



Mabruk Oil Company **Libya**



Saudi Electricity Company,



BADAN PENGELOLA KEUANGAN Haji, Indonesia



NATO **Italy**



ENI CORPORATE UNIVERSITY, Italy



Gulf Bank Kuwait



General Organization for Social Insurance KSA



Defence Space Administration **Nigeria**



National Industries Group (Holding), Kuwait



Hamad Medical Corporation, **Qatar**



USAID **Pakistan**



STC Solutions, **KSA**



North Oil company,



EKO Electricity



Oman Broadband



UN.







Blackbird Training Categories

Management & Admin

Entertainment & Leisure

Professional Skills

Finance, Accounting, Budgeting

Media & Public Relations

Project Management

Human Resources

Audit & Quality Assurance

Marketing, Sales, Customer Service

Secretary & Admin

Supply Chain & Logistics

Management & Leadership

Agile and Elevation

Technical Courses

Artificial Intelligence (AI)

Hospital Management

Public Sector

Special Workshops

Oil & Gas Engineering

Telecom Engineering

IT & IT Engineering

Health & Safety

Law and Contract Management

Customs & Safety

Aviation

C-Suite Training











