Advanced Critical Thinking and Complex Problem-Solving Training Course



07 - 11 Dec 2026

Cape town

4600 € (Per Person)

Ref: #PS1095_258168

Course Introduction / Overview:

In today's volatile and complex business environment, the ability to think critically and solve intricate problems is no longer a niche skill but a core competency for professional success. This course is meticulously designed to move beyond theoretical concepts and equip participants with a practical, actionable toolkit for dissecting challenges, evaluating information, and formulating robust solutions. We delve into the cognitive mechanisms that underpin effective reasoning, drawing on seminal works like Daniel Kahneman's "Thinking, Fast and Slow" to understand and mitigate common cognitive biases that can cloud judgment. Participants will learn to navigate ambiguity, challenge assumptions, and apply structured methodologies to problems that lack clear precedents. BIG BEN Training Center has developed this program to foster a mindset of intellectual rigor and creative inquiry, enabling individuals and teams to transform complex obstacles into strategic opportunities. This journey will enhance analytical reasoning, foster innovative thinking, and build the confidence needed to lead through uncertainty, making you an indispensable asset to your organization.

Target Audience / This training course is suitable for:

- Team Leaders and Supervisors.
- Project Managers and Program Coordinators.
- Department Heads and Senior Managers.
- Analysts and Strategists.
- Engineers and Technical Professionals.
- Human Resources and Organizational Development Specialists.
- Operations and Logistics Managers.
- Anyone aspiring to a leadership role requiring advanced decision-making skills.

Target Sectors and Industries:

- Information Technology and Telecommunications.
- Banking, Finance, and Insurance.
- Healthcare and Pharmaceuticals.
- Engineering and Construction.
- Manufacturing and Supply Chain.
- Energy, Oil, and Gas.
- Governmental and Public Sector Organizations.
- Consulting and Professional Services.

Target Organizations Departments:

- Operations and Production.
- Strategy and Corporate Planning.
- Project Management Office (PMO).
- Research and Development (R&D).
- Human Resources and Training.
- Finance and Accounting.
- Quality Assurance and Control.
- Marketing and Sales.

Course Offerings:

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

- Deconstruct complex problems into manageable components.
- Apply various analytical frameworks for root cause analysis.
- Identify and counteract cognitive biases in personal and group decision-making.
- Utilize creative thinking techniques to generate innovative solutions.
- Develop and evaluate arguments based on evidence and logical reasoning.
- Structure a comprehensive decision-making process under uncertainty.
- Communicate complex solutions clearly and persuasively to stakeholders.
- Lead problem-solving sessions with confidence and effectiveness.

Course Methodology:

The training methodology at BIG BEN Training Center is grounded in the principles of adult learning, emphasizing active participation and real-world application. This course is not a passive lecture series; it is an immersive, interactive experience. We utilize a blended approach that includes expert-led presentations, dynamic group discussions, and collaborative workshops. A significant portion of the training is dedicated to hands-on exercises, including the analysis of complex case studies drawn from various industries. Participants will work in teams to tackle simulated business challenges, applying the tools and frameworks learned in real-time. This experiential learning is reinforced through peer feedback and expert coaching, allowing for a deeper understanding of the concepts. Our approach ensures that participants leave not just with new knowledge, but with the practical skills and confidence to apply critical thinking and problem-solving techniques immediately upon their return to the workplace, driving tangible results for their organizations.

Course Agenda (Course Units):

Unit One: Foundations of Critical Thinking and Problem Analysis

- The Anatomy of an Argument.
- Distinguishing Critical Thinking from Everyday Thinking.
- Identifying and Overcoming Cognitive Biases (e.g., Confirmation Bias, Anchoring).
- The Problem-Solving Cycle: From Identification to Resolution.
- Techniques for Accurately Defining and Framing Problems.
- Stakeholder Analysis and Mapping Complex Environments.
- Gathering and Evaluating the Quality of Information and Evidence.

Unit Two: Advanced Analytical and Diagnostic Techniques

- Root Cause Analysis using the 5 Whys and Fishbone (Ishikawa) Diagrams.
- Logical Reasoning: Deductive vs. Inductive Approaches.
- Recognizing and Deconstructing Logical Fallacies in Arguments.
- Introduction to Systems Thinking for Understanding Interdependencies.
- Utilizing Data Analysis for Evidence-Based Insights.
- SWOT and PESTLE Analysis for Strategic Context.
- Mind Mapping for Organizing Complex Information.

Unit Three: Creative Strategies for Innovative Solutions

- Breaking Cognitive Fixation with Lateral Thinking Techniques.
- Structured Brainstorming and Idea Generation Methods (e.g., SCAMPER).
- Introduction to Design Thinking Principles for User-Centric Solutions.
- Developing Alternative Scenarios and Future-State Visions.
- The Six Thinking Hats Method for Comprehensive Idea Evaluation.
- Analogical Reasoning: Drawing Solutions from Unrelated Fields.
- Fostering a Team Environment that Encourages Creativity.

Unit Four: Structured Decision Making Under Complexity

- Decision-Making Models: Rational, Bounded Rationality, and Intuitive.
- Building and Using a Decision Matrix for Multi-Criteria Choices.
- Cost-Benefit Analysis and Return on Investment (ROI) Evaluation.
- Risk Assessment and Mitigation Strategies.
- Making Decisions with Incomplete or Ambiguous Information.
- Scenario Planning to Prepare for an Uncertain Future.
- Ethical Considerations in the Decision-Making Process.

Unit Five: Implementing Solutions and Leading Change

- Developing a Robust Action Plan for Solution Implementation.
- Communicating Complex Ideas Persuasively to Diverse Audiences.
- Gaining Buy-In and Managing Stakeholder Expectations.
- Monitoring Progress and Establishing Key Performance Indicators (KPIs).
- Techniques for Evaluating the Effectiveness of Implemented Solutions.
- Leading and Facilitating Collaborative Problem-Solving Teams.
- Building a Personal Development Plan for Continuous Improvement.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can an organization cultivate a culture of critical inquiry where challenging assumptions is rewarded rather than penalized?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by moving beyond the mere cataloging of problem-solving tools and focusing on the integration of cognitive psychology with practical business application. While many programs teach analytical techniques in isolation, we emphasize the human element, dedicating significant time to understanding and mitigating the cognitive biases that derail even the most structured processes, a concept deeply explored by thinkers like Daniel Kahneman. Our curriculum is uniquely structured to build skills progressively, starting with the foundational ability to think about thinking itself, then layering on analytical, creative, and strategic frameworks. The emphasis on hands-on, collaborative case studies ensures that learning is not abstract but applied. Participants do not just learn about the Fishbone diagram; they build one to solve a relevant, complex problem. This holistic approach, which combines the rigor of analytical methods with the flexibility of creative thinking and the awareness of psychological pitfalls, ensures that graduates are not just problem solvers but are also more insightful, adaptable, and effective leaders capable of navigating the complexities of the modern business landscape.