

# Mastering Critical Thinking for Real-World Problem Solving

## Workshop Overview:

This 3-day online workshop helps learners develop logical reasoning, analytical decision-making, and creative problem-solving skills. Through interactive sessions, real-life case studies, and guided exercises, participants learn how to apply critical thinking in academic, personal, and professional contexts.

## Workshop Learning Outcomes:

- 1 Understand the core principles and mindset of critical thinking.
- 2 Identify cognitive biases and faulty reasoning in arguments.
- 3 Apply structured problem-solving frameworks to real-world situations.
- 4 Strengthen decision-making through evidence-based evaluation.
- 5 Communicate ideas logically and persuasively with confidence.

## Session 1: The Foundation of Critical Thinking

Explore what it truly means to 'think critically.' This session introduces the fundamentals — logic, reasoning, and the psychology behind decision-making.

- 1 Definition and scope of critical thinking in daily life.
- 2 Distinguishing between opinion, fact, and belief.
- 3 Introduction to deductive and inductive reasoning.
- 4 Recognizing assumptions and hidden biases.
- 5 Practicing 'slow thinking' through reasoning exercises.

## Session 2: Spotting Biases and Building Logical Arguments

Learn how to identify and counter common reasoning errors — from confirmation bias to strawman fallacies. You'll practice dissecting flawed arguments and reconstructing them into sound logic.

- 1 Common logical fallacies and how to detect them.
- 2 The role of emotion and bias in human reasoning.
- 3 Techniques for objective analysis of information.
- 4 Framework for constructing strong logical arguments.
- 5 Tools to maintain intellectual humility and fairness.

## Session 3: Applying Critical Thinking to Real-World Problems

Put your learning into action through practical exercises and group problem-solving challenges. Participants will analyze real-world scenarios applying critical thinking frameworks.

- 1 Using the 'IDEAL' problem-solving model.
- 2 Collaborative critical thinking in team discussions.
- 3 Evaluating sources and evidence for credibility.
- 4 Applying reasoning to ethical and societal issues.
- 5 Creating personal action plans to continue developing critical thinking.