

ISTQB® Certified Tester – Testing with Generative AI (CT-GenAI)

Move from experimenting with AI to mastering it — with structured, testable, and enterprise-ready Generative AI practices

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1. Course Information

The **ISTQB® Certified Tester – Testing with Generative AI (CT-GenAI)** certification is a **specialist-level programme** designed to equip professionals with the knowledge and practical skills to **test, validate, and leverage Generative AI (GenAI) systems** in modern software environments.

This course focuses on the **unique challenges of testing GenAI applications**, including Large Language Models (LLMs), prompt engineering, non-deterministic outputs, hallucinations, bias, and ethical risks. Participants will learn how to design effective testing strategies, validate GenAI-driven systems, and integrate AI into the software testing lifecycle.

In addition, the programme provides hands-on exposure to **prompt engineering, AI-assisted testing, and enterprise adoption strategies**, enabling organizations to move from experimental AI usage to **structured, reliable, and scalable GenAI implementations**.

This course prepares participants for the **ISTQB® CT-GenAI certification examination** and supports career advancement in **AI-driven quality engineering and digital transformation**.

👉 The course structure and modules are aligned with practical GenAI testing applications, including prompt engineering, risk management, and enterprise integration

2. Who Should Attend This Course

This course is suitable for:

- Software testers and QA professionals
- Test analysts, test automation engineers
- Software developers working with AI/GenAI systems
- User Acceptance Testers (UAT)
- Test managers and quality managers
- Project managers and product owners
- Business analysts and digital transformation teams

Recommended for:

- AI practitioners and data professionals
- DevOps and platform engineers
- IT leaders and innovation teams
- Organizations adopting Generative AI solutions

3. Topics Coverage (2-Day Course)

Module 1: Introduction to Generative AI for Software Testing

- Fundamentals of Generative AI and LLMs
- Applications of GenAI in software testing
- Chatbots, LLMs, and AI-powered tools

Module 2: Prompt Engineering for Effective Testing

- Principles of prompt engineering
- Designing test scenarios using prompts
- Improving accuracy and consistency of AI outputs
- Evaluating and refining prompts

Module 3: Managing Risks of Generative AI in Testing

- AI hallucinations and output reliability
- Bias and ethical considerations
- Data privacy and security risks
- Governance and compliance

Module 4: LLM-Powered Test Infrastructure

- GenAI architecture and ecosystem
- Retrieval-Augmented Generation (RAG)
- AI agents and automated testing workflows
- LLMOps and model lifecycle management

Module 5: Deploying and Integrating GenAI in Testing

- Enterprise adoption of GenAI
- Integration into testing lifecycle
- Change management and capability building
- Scaling GenAI for organizational use

PAGE 2 – LEARNING OUTCOMES & DETAILS

4. By the End of This Course, Participants Will Be Able To:

Upon successful completion, participants will be able to:

- Understand Generative AI concepts and real-world applications
- Apply prompt engineering techniques for software testing
- Design and execute test strategies for GenAI systems
- Identify and mitigate risks such as hallucinations, bias, and security issues
- Evaluate GenAI outputs for accuracy, reliability, and quality
- Build and manage GenAI-powered testing environments
- Integrate GenAI into existing QA and DevOps processes
- Support enterprise adoption of GenAI in software testing
- Enhance productivity using AI-assisted testing techniques

5. Course Duration

Duration: **2 Days**

Total Contact Hours: **14 Hours**

Mode:

- Face-to-Face (F2F)
- Virtual Instructor-Led Training (VILT)

6. Exam Information (ISTQB® CT-GenAI)

Certification Body:

Malaysian Software Testing Board (MSTB)

(Local representative of ISTQB®)

Exam Format:

- Multiple Choice Questions
- Duration: ~60 minutes
- Pass Mark: ~65% (subject to ISTQB guidelines)

Certification Validity: **Lifetime**

Certification Level: **Specialist / Advanced**

7. Pre-Requisites

- Recommended: ISTQB® Certified Tester Foundation Level (CTFL)
- Basic understanding of software testing principles
- Familiarity with AI/GenAI concepts is beneficial but not mandatory

8. Additional Information

Training Approach

- Instructor-led, highly interactive sessions
- Hands-on prompt engineering exercises
- Real-world GenAI testing use cases
- Practical demonstrations and discussions
- Exam-focused preparation

Delivery Options

- Public training programmes
- Corporate / in-house training
- Customised GenAI workshops

Materials Provided

- Official ISTQB® CT-GenAI training materials
- Sample exam questions
- Course completion certificate

Why Choose This Course?

- ✓ Globally recognized **GenAI Testing certification by ISTQB®**
- ✓ High-demand skillset for **AI-driven organizations**
- ✓ Practical focus on **real-world GenAI challenges**
- ✓ Enables **safe, reliable, and scalable AI adoption**
- ✓ Applicable across industries: banking, telecom, healthcare, government, and tech