

AiU Certified GenAI-Assisted Test Engineer (GenAiA-TE)

OEM: AiU • Code: GenAiA-TE

COURSE DESCRIPTION

Securing the future of many companies will depend on how they use AI. This is because all market participants will try to make the most of what is possible to gain a competitive advantage. By taking part in our AiU Certified GenAI-Assisted Test Engineer Training you stay ahead and position yourself at the forefront of the testing field by integrating AI into your skillset. You will gain hands-on experience with real-world projects and scenarios that prepare you for immediate use in your daily software testing activities, since 85% of this training is hands-on. Our expert Instructors make sure you can learn from leaders in the field, bringing you the latest insights and techniques from the world of AI testing.

AUDIENCE PROFILE

- This training is designed for software testing professionals, who would like to use the possibilities of GenAI in their daily work to maximize their software quality assurance contributions. This training will change the way you work and bring you to the State-of-the-Art of AI-Assisted Testing.

PREREQUISITES

- Hands-On testing experience
- ISTQB CTFL or Equivalent Subject Knowledge specifically on test design techniques - ECP, BVA, Decision Tables and State Transition Testing
- Technical/Equipment Requisites
- Laptop
- Good Internet Connectivity
- LLM Pro Account (e.g. ChatGPT GPT-4)
- NO Programming experience required

COURSE OBJECTIVES

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

- Understand and apply the concepts covered under "AI-Assisted Testing Introduction"
- Understand and apply the concepts covered under "Prompt Engineering"
- Understand and apply the concepts covered under "Requirements Review"
- Understand and apply the concepts covered under "Test Generation and Optimization"
- Understand and apply the concepts covered under "Test Data Generation"

- Understand and apply the concepts covered under "Bug Advocacy"
- Understand and apply the concepts covered under "The Road Ahead"

COURSE OUTLINE

Module 1: AI-Assisted Testing Introduction

- AI has changed the way we look at the problem space in testing. The possibilities are endless. To some it is intimidating and to others, like us and the target audience of this offer, it opens new doors.

Module 2: Prompt Engineering

- Like most things in testing, coming up with effective and efficient prompts is a craft as well as an art. Low on jargons, here we delve directly into various prompting techniques that can help a tester or anyone in general.

Module 3: Requirements Review

- Capturing requirements is a critical step in a development life cycle, as this is where one or more individuals try to express usually a vague notion of what is to be built, in a recorded format. In this translation of what is supposed to be built (which could have its own issues in understanding) versus what is captured, there can be many issues. Requirement review is a stage for one of the earliest forms of testing where testers can contribute in making the requirements better. Given the inherent complexity of requirement reviews, AI can be of great assistance to a tester.

Module 4: Test Generation and Optimization

- If one were to name one skill which is absolutely critical for a tester, that's test design. It usually gets to be a very involved task when we look at a test object as a whole and often needs experienced testers or consultants with specialized skills. With AI available to assist you, any tester with foundational knowledge can generate pretty comprehensive test design using AI.

Module 5: Test Data Generation

- A tester creates variants of test data to exercise a single test idea in various forms. Many a times, it's the test data which makes a test case stand unique amongst others. For complex domains, coming up with appropriate test data is a challenge and AI is here to assist in this.

Module 6: Bug Advocacy

- Large Language Models built on Natural Language Processing are especially powerful at generating and evaluating textual contents in various formats. A tester can use this power to advocate bugs in a better manner by writing reports that sell.

Module 7: The Road Ahead

- Beyond the scope of this course, there are still many current and future possibilities for AI assistance in testing. This concluding section gives a glimpse of these opportunities. Also, it retrospects how AI is not a full replacement of human intellect and how in combination these two forms of intelligence can do magic.