Course : ISTQB - Certified Artificial Intelligence (AI) Tester, certification

ISTQB ® Certification (CT-AI) (CTFL)

Practical course - 4d - 28h00 - Ref. IAQ

Price : 3290 CHF E.T.

4,2 / 5

NEW

This training course provides you with the key skills needed to validate artificial intelligence systems. You'll learn how to test Machine Learning models, manage bias, transparency and ethics. You'll know how to design and run tests adapted to AI: neural networks, autonomous systems, A/B or metamorphic tests. You'll also discover how to use AI for defect analysis and test case generation. The final exam validates your expertise in AI system testing.

Teaching objectives

At the end of the training, the participant will be able to:

- Comprendre les tendances de l'IA, ses applications concrètes et son impact sur les secteurs d'activité
- Develop ML model testing skills and address challenges such as bias, transparency and ethics
- Design and run AI-specific test scenarios

Intended audience

Software testers, quality assurance professionals, AI engineers and developers, product owners, project managers, quality managers, analysts, consultants and AI-related professions.

Prerequisites

ISTQB® Certified Tester Foundation certification.

PARTICIPANTS

Software testers, quality assurance professionals, AI engineers and developers, product owners, project managers, quality managers, analysts, consultants and AI-related professions.

PREREQUISITES

ISTQB® Certified Tester Foundation certification.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

Certification

L'examen de certification AI Testing (CT-AI) est inclus dans la formation et se déroule en présentiel dans nos centres de formation, en français, ou à distance si la formation a lieu en distanciel. Il a lieu le dernier jour de la formation. L'épreuve consiste en un QCM de 40 questions, d'une durée de 60 minutes. Les candidats dont la langue maternelle n'est pas le français ou en situation de handicap peuvent bénéficier d'un quart-temps supplémentaire, sous réserve d'une demande effectuée au moins 5 jours avant l'examen. Un score minimum de 65 % de bonnes réponses est requis pour obtenir la certification.

Remote certifications

See the certifier's official documentation for the list of prerequisites for completing the online certification exam.

Course schedule

1 Introduction to AI

- AI types: narrow, general and super AI.
- AI as a service (AIaaS).
- Standards and regulations.

2 Quality features of AI systems

- Flexibility, adaptability and autonomy.
- Bias, ethics and safety in AI.
- Transparency, interpretability and explicability.

3 Overview of Machine Learning (ML)

- ML workflow and algorithm selection.
- Overfitting, underfitting.

4 ML - Data

- Training, validation and test data sets.
- Data quality issues and effects on ML models.
- Data labeling and approaches.

5 Measuring ML functional performance

- Confusion and performance matrix in ML.
- Limits and test suites for ML models.

6 ML - Neural networks and testing

- Introduction to neural networks.
- Implementation of a simple perceptron.
- Coverage measurements for neural networks.

7 Testing AI-based systems - Overview

- Specification and test levels.
- Test data and approaches.
- Test for automation bias.

TEACHING AIDS AND TECHNICAL RESOURCES

• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

8 Test IA quality features

- Challenges in testing autonomous systems.
- Address algorithmic bias and complexity.
- Testing complex AI systems.

9 Methods and techniques for testing AI systems

- Adversarial attacks and data poisoning.
- Pairwise, back-to-back, A/B and metamorphic tests.
- Selection of test techniques.

10 Test environments for AI systems

- Configuration and considerations for test environments.
- Virtual test environments for AI testing.

11 Using AI for testing

- AI technologies for testing.
- AI in defect analysis and test case generation.
- AI in fault prediction and HMI testing.

12 Certification exam

- Multiple-choice questionnaire, 40 questions.
- 1 hour, 65% correct answers required.

Dates and locations

REMOTE CLASS
2026 : 10 Feb., 26 May, 15 Sep., 8 Dec.