Software Testing with AI: Generate, Automate and Improve QA Tests

Training Program



Move from specifications to executed tests and evidence-based quality decisions.

This course helps testers and quality leads use AI to design scenarios, enrich existing tests and analyse defects. Workshops connect specifications, risks, automated tests and observed results. Participants also verify AI outputs rather than treating a generated test as sufficient proof of quality.

Objectives and target skills

- Derive verifiable scenarios from specifications and risks.
- Generate and execute suitable unit, functional or integration tests.
- Prioritise coverage and regression checks.
- Use logs and results to investigate defects.
- Prepare a load scenario and identify limitations of generated tests.

Audience	Prerequisites	Duration
✓ Software testers, QA engineers, quality leads, lead developers and tech leads.	✓ Knowledge of testing practices, user stories and acceptance criteria. ✓ A computer, authorised AI assistant and an environment able to run the exercise tests. ✓ Specifications, tests and anonymised logs where available; tools are agreed during the initial assessment.	1 day, or 7 hours.

Training content

Frame QA uses and risks

- Compare general-purpose assistance and specialist tools, potential errors and QA responsibility.
- Connect quality objectives, specifications, risks and human checks.

Design test cases

- Turn user stories and acceptance criteria into normal, boundary and error scenarios.
- Extend existing tests and prepare non-sensitive test data.

Automate and maintain

- Generate and execute relevant tests and analyse observed failures.
- Adapt scripts and assertions to changes; distinguish real defects from fragile tests.

Analyse coverage and defects

- Prioritise critical areas, indirect impacts and regression checks.
- Cross-check logs and symptoms, propose a hypothesis and produce a reproducible report.

Load, simulation and AI systems

- Prepare a bounded load or simulation scenario in an authorised environment.
- Check testing limitations and assess an AI system's responses.

Workshop and deliverables

- Test scenarios, executed tests and a results summary.
- A coverage strategy, defect report and regression checklist.

Access conditions

Before the course starts, an initial assessment questionnaire identifies the participant's professional activity, expectations, existing skills and technical environment. An additional discussion is arranged if needed to check that the course is suitable and prepare any necessary adjustments. Enrolment is normally arranged between two months and one week before the course starts, subject to available places, prerequisites and, where applicable, the funding body's processing times. Practical arrangements are provided in the joining instructions. Terms and conditions of sale: https://www.opcoach.com/cgv. The initial assessment identifies testing practices, technologies, the exercise environment and priority test types.

Accessibility for people with disabilities

Participants with disability-related needs are invited to tell OPCoach before the course starts. OPCoach works with them to assess possible teaching, technical and organisational adjustments, including for the initial assessment and learning assessments. Specialist partners may be involved if needed. Disability contact: Chrystèle Lagarde. To be put in touch with her, contact OPCoach at olivier.prouvost@opcoach.ai or +33 6 28 07 65 64.

Training format

The course is trainer-led, on site or remotely, live via Zoom. Demonstrations, exercises and assessments take place during supervised training time.

Group size

Open-enrolment training: 2 to 8 participants. In-company / dedicated training: 1 to 6 participants, on site or remotely.

Fees

Open-enrolment training: **EUR 875 excluding VAT per participant**. A minimum of two enrolments is required. For two or more participants from the same company, the in-company rate applies.

In-company / dedicated training: **EUR 1,250 excluding VAT for two participants, +/− EUR 150 excluding VAT per participant added or removed**, for groups of 1 to 6 participants. Access to the tools required for the workshops must be arranged before the course. Subscriptions and third-party services are not included in the fee. The course can be paid for directly by the company or the participant. A funding application may be submitted to the company's French skills funding body (OPCO), subject to its eligibility rules and processing times. Any funding remains subject to the funding body's prior approval.

Schedule

Check the upcoming sessions and arrangements on OPCoach.ai. Availability is updated on this page. For a dedicated session, contact OPCoach.

Training location

Inter-company training takes place in our InterIndep premises at 2 impasse Michel Labrousse, 31100 Toulouse. The training room is accessible by public transport and by car, and has parking facilities. Several restaurants and a hotel are located nearby. A break area is available for cold and hot drinks during breaks. All these facilities are accessible to people with reduced mobility. In-company training is preferably delivered at the client's premises. Hosting conditions are validated before the training. Remote training is delivered with Zoom and can be organized as inter-company or in-company training.

Teaching approach

Alternating short lectures and individual hands-on exercises on a workstation. Sharing and discussion of the results obtained. Technical and teaching assistance is provided by Olivier Prouvost during the course: olivier.prouvost@opcoach.ai - +33 6 28 07 65 64.

Teaching resources

On site: training room with video projector, whiteboard, high-speed Wi-Fi and a training binder provided to the participant. Remote: high-speed internet access, webcam, free Zoom software, PDF course material sent to the participant. One workstation per participant. Digital course materials and exercise files are provided to participants. Connection details and instructions for accessing resources are included in the joining instructions. Participants keep the deliverables they produce during the workshops.

Trainer supervision

Olivier Prouvost, DEA in Computer Science, recognized open source expert and trainer for more than 20 years, developer of AI solutions to optimize SMEs, speaker at international conferences, Eclipse committer on several projects, founder of OPCoach, a Qualiopi-certified training organization since 2020, and ICPF & PSI certified expert trainer and consultant.

Learning assessment

Attendance is recorded through electronic sign-in, both on site and remotely. For remote training, the trainer also checks completion of activities and each participant's progress. Assessment criteria are presented at the start of the course. Participants create and execute tests from a specification and explain the results. Criteria cover scenario relevance, boundary cases, assertions, reproducibility, risk coverage and critical assessment of generated tests.

Recognition

This vocational training course is non-certifying: it does not prepare participants for a certification registered in the French National Directory of Professional Certifications (RNCP) or Specific Register (RS). A statement of skills records the learning outcomes observed during assessments. A certificate of completion records actual participation.

Satisfaction assessment

At the end of the training, the participant completes a satisfaction survey and takes part in a group feedback session. The participant benefits from unlimited email support for practical questions related to the training. After 3 months, or after applying the training in the workplace, a follow-up questionnaire is completed to assess practical use.

Technical, teaching, administrative and financial contact

Olivier Prouvost, +33 6 28 07 65 64, olivier.prouvost@opcoach.ai