

Course : IAG for project managers, analysts, developers and IS architects

Artificial generative intelligence (AGI) by profession

Seminar - 2d - 14h00 - Ref. IAA

Price : 2170 CHF E.T.

 4,2 / 5

This course will help you prepare for the successful implementation of Generative Artificial Intelligence (GAI) within your company, by discovering the opportunities for integrating GAI into the software solution lifecycle. You'll see how IAG meets the specific needs of certain businesses, but also how it is useful for the collaborative management of IT projects or the optimization of agile processes.

Teaching objectives

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

- ✓ Understand the growth of the AI market and its impact on design
- ✓ Understand the practical uses of generative AI within your company
- ✓ Distinguish between the different solutions on the market: ChatGPT, Bernie, Bard, LLaMA Code, DeepCode, MetaGPT...
- ✓ Anticipate and guide changes and impacts on the project manager, architect, analyst and developer professions

Intended audience

Project managers, IS architects, analysts, professionals interested in artificial intelligence in the enterprise.

Prerequisites

General knowledge of the life cycle of a software solution.

PARTICIPANTS

Project managers, IS architects, analysts, professionals interested in artificial intelligence in the enterprise.

PREREQUISITES

General knowledge of the life cycle of a software solution.

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.

Practical details

Storyboarding workshops

The moderator outlines the various themes and concepts, alternating with questions from the large group.

Teaching methods

Méthode expositive : exposé. Méthode interrogative : question en grand groupe et sondage.

Course schedule

1 IAG for project managers and developers

- Discover AGI: definition, origins and implications for IT and development.
- Transformation de l'IAG dans le monde du développement logiciel.

2 IAG and software design

- Introduction to generative AI.
- AI, machine learning and deep learning.
- AI deep learning: how it works.
- What is image recognition?
- What is speech recognition?
- The key architectures and algorithms of generative AI.

3 IAG and the development life cycle

- Introduction to IAG-based code analysis tools such as DeepCode.
- IAG for early bug detection and test simulation.
- Using TensorFlow, PyTorch and JAX/Flax to develop AI applications.
- Use of training libraries like Accelerate or higher-level tools like Hugging Face trainers.
- MLOps tools like Weights & Biases or Tensorboard.
- Continuous integration and deployment with IAG.
- New development platforms: from Copilot to LLaMA Code.
- Tool comparison: AI for test automation versus traditional methods.
- IAG for code optimization and automated code review.
- The impact of IAG on predictive maintenance and bug fixes.
- The case of recipes and recipe books.
- Incident management with virtual assistants such as ServiceNow Virtual Agent.

4 Evolving the legacy

- Reverse engineering the code.
- Automatic documentation of existing code.
- Mapping the code and risk zones.
- Refactoring with IAG.

5 Voice and visual recognition for documentation

- Use of IAG for documentation transcription and analysis.
- Make technical documentation writing easier with AudioPen and Whisper.
- Develop software from a simple one-page sketch (illustration).

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.

6 Collaborative IT project management

- IAG for team coordination and automation of recurring tasks.
- Organize and structure needs with tools like Chatmind.
- Notion, Fireflies.ai : Key tools for collaborative project management.
- The case of MetaGPT.
- Solutions for visualizing log, performance and user data.
- Automatic generation of dashboards (e.g. sprints).
- Multifactor analysis and alert management.

7 Optimizing agile processes and integrating them into IT projects

- IAG for the improvement of agile methodologies.
- Innovative tools to strengthen sprint and backlog management.
- Agile methods: XP, Scrum, Save, etc. revisited in the light of IAG.
- How to integrate IAG to improve current development practices.
- Success stories: how companies have transformed their methods thanks to the IAG?
- Is this the end of publishers?

8 Conclusion

- Summary of IAG advances in project development and management.
- Ethical issues, security and confidentiality considerations in an IT context.
- Encourage adoption of IAG tools for optimized development and better project management.

Storyboarding workshops

Dates and locations

REMOTE CLASS

2026: 2 Apr., 23 June, 29 Sep., 10 Dec.