

Course : Innovating and transforming your business thanks to data and AI (classical or generative)

Seminar - 2d - 14h00 - Ref. ITD

Price : 2170 CHF E.T.

★★★★☆ 3,9 / 5

This seminar helps you understand the key role of AI (deep learning, machine learning, generative AI, agentic AI) and data as drivers of innovation and digital transformation. It offers a broad vision of trends and orientations in AI, as well as business and technological challenges. You'll explore market players (Mistral, Microsoft, Google, Meta...), organizational and regulatory aspects (IA Act, Data Act), as well as AI implementation and evolution. All illustrated by numerous examples.

Teaching objectives

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

- ✓ Understand the challenges of AI and data in the process of innovation and digital transformation.
- ✓ Understanding the role of AI and data in new business models
- ✓ Understanding the organizational aspects of AI and data governance
- ✓ Understand the legal framework and sovereignty in France and Europe (RGPD, IA Act, Data Act...).
- ✓ Identify key success factors for successful project management
- ✓ Adopt an overview of the most widely used AI and data architectures (data lake, data visualization)

Intended audience

Chiefs data officer, data engineers, data architects, decision-makers (General Management), business managers, business unit managers, information systems managers, digital project managers.

Prerequisites

No special knowledge required.

Course schedule

PARTICIPANTS

Chiefs data officer, data engineers, data architects, decision-makers (General Management), business managers, business unit managers, information systems managers, digital project managers.

PREREQUISITES

No special knowledge required.

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.

1 Introduction to AI and data

- What is deep learning?
- What is an artificial neuron? How does learning work?
- How do you evaluate a model?
- What is generative AI? How do I interact with ChatGPT?
- What is a data lake solution with AI?
- The role of AI in data quality.
- Error detection and correction, data standardization, data enrichment and cleansing.
- Data security.

2 AI and data in the innovation process

- Data for innovation and digital transformation.
- The issues: AI and deep learning, productivity gains, process optimization, performance gains.
- Classic challenges and mistakes.
- What is agentic AI? How it works.
- New jobs linked to data and AI.
- How to move from silo-based management to an integrated organization that encourages the use of AI.
- How to set up cross-functional governance of data and AI within the company?
- The different models, best practices.
- How can you use data and AI to optimize transformations?
- Culture of data and AI, using advanced analysis tools (deep learning, data visualization).

Group discussion

Impact on business models: human resources (recruitment automation, predictive analysis), finance (investment optimization, fraud, risk management), industry (predictive maintenance, production line optimization), public services (education, research, etc.).

3 Technical architecture: business intelligence, big data, artificial intelligence

- Business intelligence in a dematerialization context: why and for whom?
- MDM and data repositories.
- Technical data architecture: ETL, infocenter, data lake, data visualization.
- Machine learning and deep learning. Neural architecture, artificial intelligence.
- Large language models (LLM) and pre-trained generative models (GPT).
- The main types of learning.
- Deploy an AI project in your company.
- Major market players (Mistral, Microsoft, Google, Amazon, Met...).
- RAG (Retrieval-Augmented Generation): how it works, advantages.
- Practical applications (chatbots, document search, etc.).

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.

4 Data and AI governance, a lever for digital transformation

- Why is data and AI governance central to such an approach?
- What is data and AI governance?
- Key aspects of data governance and AI. Data quality, data security.
- Ethics and compliance, transparency.
- How do you set up data and AI governance?
- What are the benefits of good data and AI management and governance?
- What is the best way to set up such governance?
- Governance for data and governance for AI, or towards shared governance?
- Technical challenges and risks (MDM repository).

5 Key success factors for successful project management

- Define clear objectives.
- Establish effective governance.
- Adapt a step-by-step approach according to the company's maturity.
- Communicate effectively.
- Develop a long-term vision.
- Focus on the problem, not the technology.
- Invest in infrastructure (AI, data).
- Understand the limits of AI and data-driven management.

6 Regulatory frameworks, sovereignty, geopolitics of data and AI

- Geopolitical data issues: EU, USA, China.
- Cloud Act, e-evidence, EU-U.S. Data Privacy Framework.
- The European regulatory framework: RGPD, Data Governance Act, Data Act.
- The future European framework for artificial intelligence (AI Act).
- What's at stake when it comes to AI and data sovereignty?
- What is sovereignty? How can it be guaranteed?
- The American data framework.

7 Future trends and directions in AI and data

- The rapid evolution of generative AI and big data/small data technologies.
- How can we combine sovereignty and modernity, especially with the GAFAs (Google, Apple, Facebook, Amazon)?
- Towards ethical and responsible AI.
- Intelligent automation (RPA, AI, etc.).

Dates and locations

REMOTE CLASS

2026 : 9 June, 24 Sep., 17 Dec.