



Course syllabus

AI for Managers

A course covering the application of the latest AI technologies (including LLM, RAG, multimodal chatbots, ChatGPT, GenAI, and AI agents) to the development of projects and products in your company. The course is designed to quickly improve managerial and technical skills, enabling participants to both effectively lead advanced projects within corporate structures and build scalable startups in the field of Data Science. Participants will go through a comprehensive journey from concept to implementation, learning how to consciously select tools and create AI products that generate measurable business value and a real competitive advantage.

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AI Management: From the Inside

This module integrates knowledge of machine learning paradigms and data architecture with AI Product Management practices, enabling the precise selection of technological solutions to achieve business goals. Participants will develop the competencies necessary to effectively manage the lifecycle of data-driven products and communicate professionally with stakeholders, building a solid foundation for a managerial career in the AI sector.

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Module Topics

- Career Paths in AI (Iub AI Career Options)
- How to Talk About AI So People Will Listen
- Data, Algorithm, Model, Predictions
- DL vs. ML vs. RL (Deep Learning vs. Machine Learning vs. Reinforcement Learning)
- Data Science and Correlations
- AI Product Management: Mapping Technology to Business Problems
- Data Science Tech Stack: Essential Concepts for the Data World

The 12 Families of AI Technologies

This module presents a comprehensive taxonomy of twelve key AI domains—ranging from predictive and recommendation systems to Computer Vision and RPA—analyzing their specific characteristics, limitations, and implementation potential. Participants will acquire the competencies necessary to strategically align technologies with specific business challenges and make informed decisions regarding sourcing methods and building effective AI solutions.

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Module Topics

- An Overview of the 12 AI Technology Families: Including predictions, recommendations, RPA, Computer Vision, and more.
- Understanding Business Applications for each technology family.
- Practical AI Product Building: Matching the right solution to the business problem.
- Choosing the Best Technology for Your Company: Selection criteria and sourcing strategies.
- Pros and Cons (or Strengths and Limitations) of each technology.
- Sourcing AI Systems: Where and how to acquire AI solutions.

Generative AI, LLMs, RAG, Chatbots, and Multimodal Systems: Key GenAI Tools for Managers

This module explores the transformative potential of Generative AI, providing an in-depth look at LLM mechanisms, RAG architecture, and multimodal systems within the context of practical implementation and customization in a corporate environment. The program equips managers with an overview of key GenAI tools and applications, emphasizing the secure deployment of intelligent chatbots and their strategic alignment with an organization's specific business processes.

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Module Topics

- The Power of Generative AI: A showcase of high-impact business use cases.
- Understanding LLMs: The foundation behind every modern chatbot.
- Fine-tuning Chatbots for Your Brand: Building effective LLM + RAG systems to speak your company's language.
- Multimodal AI Systems: The future of the IT landscape.
- Key Chatbot Features tailored to specific business needs.
- Top GenAI Applications in today's market.
- Securing Your Workflow: Best practices for the safe use of GenAI tools.



AI Agents for Business

This module defines a new era of automation by providing an accessible overview of the characteristics and autonomy of AI Agents, classifying their types, and identifying their sources of competitive advantage. Participants will analyze practical case studies from key market sectors, identifying specific business deployment areas where agentic systems are revolutionizing traditional operating models.

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Module Topics

- Understanding AI Agents in 'Plain English': Where their true power lies.
- Types of AI Agents.
- Business Applications of AI Agents.
- Practical Case Studies: AI Agents across key industries.

Data is pure cash

This module elevates data to the status of a strategic organizational asset, defining methodologies for data acquisition, classification, and the effective monetization of hidden business potential. The program introduces industry-leading standards for information resource management while presenting techniques that unlock analytical value even from limited or incomplete datasets.

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Module Topics

- Understanding Data
- Unlocking the Potential of Your Data: Strategies for Monetization
- Data Types and Acquisition Methods
- Best Practices for Organizational Data Management
- Data Excellence: Working Effectively with Small and Poor-Quality Datasets

AI Project Management and Product Development

This module systematizes the AI product development process by integrating the CRISP-DM standard with Agile and Lean Startup methodologies, preparing participants for effective scheduling and budgeting of Data Science initiatives. Participants will gain the ability to define key success metrics and mitigate specific project risks, balancing analytical rigor with a focus on User Experience (UX) in the final solution.

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Module Topics

- CRISP-DM and Methodology Overview
- The Data Science (AI) Project Lifecycle
- Applying Agile and Lean Startup in AI
- AI Project Challenges and Best Practices
- Business vs. Data Science Metrics
- Scheduling and Budgeting for AI Initiatives
- UX in AI Projects

High-Performing Data Science Teams

This module focuses on the strategy for forming and scaling high-performance analytical structures, precisely defining competency roles and team-sizing principles based on project scope. The program provides proven tools for effective talent recruitment and building an organizational culture rooted in motivation and seamless communication within an interdisciplinary Data Science environment.

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Module Topics

- Roles in the Data Science Process
- Building a Data Science Team
- Scaling Teams: Project Scope vs. Team Size
- Motivation and Effective Communication
- Best Practices for Talent Recruitment



Digital transformation

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Moduł ten osadza wdrażanie sztucznej inteligencji w szerszym kontekście transformacji cyfrowej, dostarczając narzędzi do precyzyjnej analizy opłacalności (ROI) oraz strategicznego doboru inicjatyw do firmowego portfela projektowego. Uczestnicy zdobędą umiejętności niezbędne do skutecznego argumentowania wartości biznesowej przed zarządem, ucząc się budowania przekonujących uzasadnień dla inwestycji w technologie AI.

Module Topics

- Digital Transformation
- ROI Analysis for AI Projects
- Presenting AI Initiatives to the Board
- AI Portfolio Selection

Ethics of AI solutions and security

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This module addresses critical challenges associated with the responsible deployment of technology, integrating knowledge of current legal regulations and industry standards with the practice of identifying ethical risks. Participants will learn the fundamentals of intelligent systems security, gaining the tools necessary to build Trustworthy AI solutions that are compliant with regulatory requirements and resilient to specific cyber threats.

Module Topics

- Ethical Issues in AI
- AI Regulations, Law, and Standards
- Ethical Risk Analysis in AI Projects
- AI Security Fundamentals

ML Ops i Enterprise AI

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This module covers the comprehensive lifecycle management of AI systems, introducing the MLOps methodology essential for ensuring operational continuity, monitoring, and efficient model retraining in production environments. The program presents leading Enterprise AI platforms and cloud architectures, providing key knowledge for scaling projects and automating processes within large organizations.

Module Topics

- AI Project Lifecycle
- AI Product Maintenance and Model Retraining
- Enterprise AI Platforms and MLOps
- Cloud Solutions in the AI Landscape

A handwritten signature in black ink that reads 'Maria Parysz'.

Maria Parysz Instructor