Generative AI and Prompt Engineering for Enterprise Training Course

30 Nov - 04 Dec 2026

Cairo

3700 € (Per Person)

Ref: #AI3209_291092

Course Introduction / Overview:

This training course provides a comprehensive exploration of Generative AI and its strategic implementation within the enterprise landscape. As organizations seek to leverage artificial intelligence for a competitive advantage, understanding how to effectively deploy and manage these powerful tools is paramount. This program moves beyond theoretical concepts to offer a practical, hands-on approach to mastering advanced prompt engineering, model customization, and the development of a robust AI strategy. In his book, "Co-Intelligence: Living and Working with AI," author Ethan Mollick emphasizes the collaborative potential between humans and AI, a core principle that this course champions. Participants will learn to build and integrate AI solutions that enhance productivity, drive innovation, and create tangible business value. BIG BEN Training Center has designed this curriculum to equip leaders and technical professionals with the skills needed to navigate the complexities of AI adoption, from initial model selection to ensuring ethical governance and security. This course is the definitive guide for any organization aiming to transform its operations through the strategic application of generative AI technologies.

Target Audience / This training course is suitable for:

- AI Specialists and Data Scientists.
- Software Developers and Engineers.
- IT Managers and Chief Technology Officers (CTOs).
- Product Managers and Project Managers.
- Business Analysts and Strategists.
- Marketing and Content Creation Professionals.
- Innovation and Digital Transformation Leaders.
- Executives and Decision-Makers.

Target Sectors and Industries:

- Technology and Software Development.
- Financial Services and Banking.
- Healthcare and Life Sciences.
- Retail and E-commerce.
- Manufacturing and Supply Chain.
- Media and Entertainment.
- Telecommunications.
- Government Agencies and Public Sector Organizations.

Target Organizations Departments:

- Information Technology (IT) and Engineering.
- Research and Development (R&D).
- Marketing and Communications.
- Sales and Business Development.
- Customer Service and Support.
- Human Resources and Talent Management.
- Operations and Logistics.
- Strategy and Corporate Development.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop and execute a strategic roadmap for generative AI implementation.
- Master advanced prompt engineering techniques for optimal model performance.
- Evaluate, select, and customize generative AI models for specific business needs.
- Implement responsible AI frameworks, ensuring ethical and secure deployment.
- Fine-tune large language models (LLMs) to align with enterprise-specific data.
- Design and build custom AI solutions using techniques like Retrieval-Augmented Generation (RAG).
- Measure the return on investment (ROI) of AI initiatives and scale them effectively.
- Mitigate risks associated with AI, including data privacy and model security vulnerabilities.
- Lead AI-driven innovation projects from conception to deployment.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, practical, and highly interactive, ensuring participants can immediately apply their learning. This course combines expert-led instruction with hands-on labs, allowing attendees to work directly with generative AI models and prompt engineering interfaces. A significant portion of the training is dedicated to real-world case studies, where participants will analyze successful and unsuccessful AI implementations across various industries to draw actionable insights. Collaborative group projects will challenge teams to develop a complete AI strategy for a hypothetical enterprise, from model selection to a governance plan. This fosters teamwork and a deeper understanding of the cross-functional nature of AI projects. Regular Q&A sessions, peer-to-peer feedback, and one-on-one guidance from the instructor ensure that individual learning needs are met. The focus is not just on understanding the technology but on mastering its strategic application in a corporate context, preparing participants to lead AI transformation within their organizations.

Course Agenda (Course Units):

Unit One: Foundations of Generative AI in the Enterprise

- Introduction to Generative AI and Large Language Models (LLMs).
- The Business Case for Enterprise AI.
- Key Terminology and Concepts in AI.
- Overview of Major AI Models (e.g., GPT, Llama, Claude).
- Understanding AI-Driven Innovation and Disruption.
- Identifying High-Impact Use Cases for Generative AI.
- The Role of Data in Training and Fine-Tuning Models.

Unit Two: Mastering Advanced Prompt Engineering

- Fundamentals of Effective Prompting.
- Advanced Techniques: Chain-of-Thought and Tree-of-Thought Prompting.
- Zero-Shot, One-Shot, and Few-Shot Prompting Strategies.
- Crafting Prompts for Complex Tasks and Workflows.
- Prompt Chaining for Multi-Step Processes.
- Recognizing and Mitigating Prompt Injection Attacks.
- Developing a Standardized Prompt Library for Your Organization.

Unit Three: AI Model Selection, Customization, and Fine-Tuning

- Comparing Proprietary vs. Open-Source AI Models.
- Framework for Evaluating and Selecting the Right Model.
- Introduction to Fine-Tuning and Its Business Applications.
- Parameter-Efficient Fine-Tuning (PEFT) Methods.
- Building Custom Solutions with Retrieval-Augmented Generation (RAG).
- Data Preparation and Management for Model Customization.
- Assessing the Performance and Accuracy of Customized Models.

Unit Four: Enterprise AI Implementation and Strategy

- Developing a Strategic AI Implementation Roadmap.
- Integrating AI into Existing Business Processes and Workflows.
- Project Management for AI Initiatives.
- Building and Managing High-Performing AI Teams.
- Measuring the ROI and Business Impact of AI Projects.
- Strategies for Scaling AI Solutions Across the Enterprise.
- Change Management for an AI-Enabled Workforce.

Unit Five: Governance, Ethics, and Security in Generative AI

- Establishing a Robust AI Governance Framework.
- Data Privacy and Compliance in the Age of AI.
- Mitigating Bias and Ensuring Fairness in AI Models.
- Key Security Risks and Vulnerabilities in Generative AI.
- Developing a Responsible AI Charter for Your Organization.
- Legal and Regulatory Considerations for Enterprise AI.
- Creating a Culture of Ethical AI Use.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

As generative AI becomes increasingly integrated into core business functions, how can organizations balance the drive for automated efficiency with the preservation of human creativity and critical oversight?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by focusing squarely on the enterprise context, moving beyond the technical mechanics of prompt engineering to address the strategic challenges of AI adoption. While other programs may concentrate on individual tools or coding, this curriculum is built around developing a comprehensive, deployable AI strategy. It uniquely integrates three critical pillars: advanced technical skills, strategic business implementation, and robust ethical governance. Participants will not only learn how to write effective prompts but also how to select the right models, measure ROI, and build a responsible AI framework that aligns with corporate values and regulatory requirements. The emphasis on real-world case studies and the development of a strategic roadmap provides a practical, actionable framework that is often missing from more theoretical or tool-specific courses. The academic rigor ensures a deep understanding of concepts, preparing participants not just to use AI, but to lead its integration and transformation within their organizations, ensuring long-term, sustainable value rather than short-term tactical gains.