![Learnbay logo]

MasterTrack for **Managers & Leaders**

GenAI and Agentic AI Master Certification

for Senior Managers & Leaders

In collaboration with : **IBM**

Integrated with: LangChair ChatGPT Agentic AI

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Program **Summary**

Program Eligibility

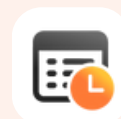Working professionals having **4+ years of exp.**

Training Mode

100% Live Online Sessions with **Live Projects**

Program Faculty

Seasoned Industry Experts & Mentors

Program Duration

4 Months Program with live project

Payment Options

No cost EMI, Interest free loan

Certification

Earn an IBM-verified Certification in **Generative AI**

Exclusive

Real Project Experience For Managers

Lead a Team
Learn how to integrate GenAI into business

Project Life Cycle
Learn to oversee the entire project.

Practical Skills
Gain hands-on experience in handling GenAI Project.

Industry Knowledge
Develop expertise in your specific domain.

About **Course**

This program is for **tech managers and tech leaders** with 4+ years of experience who want to harness the power of Generative AI for strategic innovation. It uses a **project-based approach**, with guidance from industry experts and personalized mentoring.

The course also covers **Large Language Models, OpenAI APIs, LangChain, and RAG** for business solutions. By the end, you'll be equipped to drive AI-driven projects, enhance decision-making, and lead innovation in your organization.

Our **Commitment**

Equip tech managers and senior leaders to understand and **lead Generative AI projects**, covering essential concepts, practical applications, and tools for strategic decision-making.
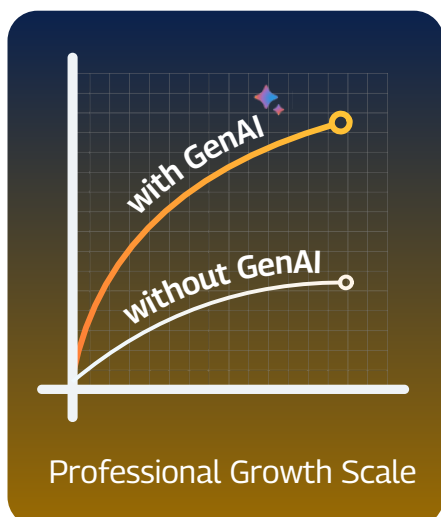
Furthermore, our comprehensive career support services include **interview preparation, resume building, and job placement assistance**, all designed to help you smoothly transition into leadership roles in AI and Machine Learning.

100%
Assured Interview

350+
Hiring Partners

7+
Centers Across India

40k+
Professionals Upskilled

Professional Growth Scale

with GenAI

without GenAI

70%

of companies are likely to adopt GenAI in next 5 years, to

- enhance efficiency,
- automating tasks,
- improving decision-making for better project outcomes.

*By integrating GenAI into our program, we ensure that our learners are well-prepared to lead and innovate in their respective fields.

Who is this Certification for?

A unique certification for Managers and Leaders!

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Mid to Senior Level Professionals with 4+ Years of Experience

This certification is perfect for Project managers, Technical Leaders, Team leads preferably from tech domains.

Project Manager   **Team Lead (IT/Non-IT)**

Course Prerequisites: You should have knowledge of Python, Machine Learning, and basic Deep Learning. If **you don't have these skills**, you can first complete our foundation program before joining this course.

Program Outcome: What's in it for you?

Master GenAI For Business Transformation

Learn to harness cutting-edge **GenAI tools** to solve real-world challenges and lead your organization into the future

Real-World GenAI Project Portfolio

Work on live projects like chatbot creation, **workflow automation**, and RAG-powered assistants to showcase your expertise.

Accelerate Your Career Growth

Leverage advance GenAI knowledge to drive business success, enhancing career prospects and **salary growth.**

Why choose Learnbay?

For GenAI Program for Tech Managers

Industry-Backed Certification
Stand out with a prestigious certification from **IBM**

Get Certified from IBM

Project-Based Learning
Gain hands-on experience with **real-world GenAI projects**, preparing you to tackle industry challenges confidently.

Real Projects | Real Experience

Learn from GenAI Industry Mentors
Gain insights from top industry experts in Generative AI. Our mentors bring **real-world experience** to help you master advance skills.

Personalized Support
Get tailored guidance with 1:1 doubt-clearing sessions for a deeper understanding.

Alumni **Spotlight**

Learnbay has helped me a lot to learn data science applications in the e-commerce industry. The live class concept was really helpful in receiving proper DS training. Thanks to all my mentors and the placement team.

Shravanthi A
Data Scientist

| Mechanical Domain | → | Data Scientist @ | Ford | 📈 **230% Salary Hike** |

The course structure is excellent with emphasis on concept building and tools & software at the same time. The support team is excellent and supportive and quite agile to respond to doubts.
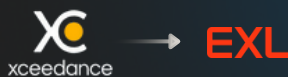
Preksha Mishra
Lead Data Scientist

| Telecom Domain | → | Data Scientist @ | HCL | 📈 **140% Salary Hike** |

Karan Chawala

xceedance → EXL

Data Scientist

Jaya Sinha

ADITYA BIRLA GROUP → Infosys

Senior Analyst

Shubham Dev

Sapient → brillio

Lead Data Analyst

Alumni **Spotlight**

Thanks to the Learnbay data science course & excellent guidance, I was able to ace the TCS interview and secure a job with a 210% pay raise. The real-world time projects helped me develop my concepts as a data scientist.

Mohd. Israr
Data Scientist

Mechanical Domain → **Data Scientist @** tcs — **230% Salary Hike**
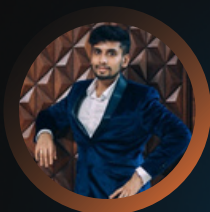
When I joined Learnbay I did not have any knowledge apart from the very basics. I gradually build my concept via various trainers and get trained in data science with strong knowledge/concepts.

Saurabh Kumar
Data Scientist

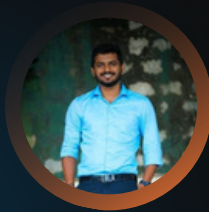**Mathematics Professor** → **Data Scientist @** Teleperformance — **135% Salary Hike**
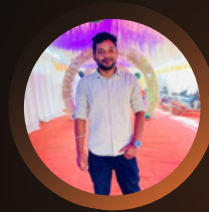
Aravind

TheMathCompany → CATERPILLAR

Data Scientist

Ritesh Kumar

unacademy → Capgemini

Senior Analyst

Ramki

cognizant → ANB SYSTEMS a DNV company

Data Analyst

Get Certified
and accelerate your career growth

Generative AI Certification

Certification from IBM in
Generative AI

✓ **Real-World GenAI Projects:**
Hands-on exposure to industry-relevant projects using IBM Watsonx and leading Generative AI tools.

✓ **Expert-Led Training:** Interactive live sessions led by seasoned industry professionals from IBM's Developer Skills Network.

Program Fees

Live online classes

✓ Live online interactive sessions
✓ 1:1 online Doubt Session with experts
✓ Virtual Mock interviews
✓ Online Capstone projects

Program Fee

₹ 95,000/- +18% GST

EMI starts at
₹ 7,916/-

Payment Plan: **No Cost EMI Available**
For 6, 9 and 12 Months

Learnbay

Cerification
Curriculum

A unique certification for
Managers and Leaders!

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GenAI Foundation Prep Module (Optional)

Duration: 36 Hours

This preparatory module is designed for **learners new to Python programming and Machine Learning (ML)**. It provides foundational knowledge essential for **mastering advanced Generative AI topics**.

Who should attend?

- Non-programmers transitioning into Generative AI.
- Professionals aiming to refresh Python and ML basics.

Note: This **fast-track module** is recommended primarily for professionals with a **tech** or **programming background**. Non-tech professionals are advised to join detailed foundational sessions from our data science programs.

Python Programming

We will learn basic Python programming and essential tools like **NumPy, Pandas, and Matplotlib.**
This Python module will be **fast-tracked**. If you are a non-programmer, you can attend our detailed Python for Data Science modules.

Duration - 15-18 hrs

Chapter 1: Core Python

- Installation, Jupyter notebook basics, variables, data types
- Conditionals, loops, functions, basic data structures

Chapter 2: Python Libraries

- NumPy fundamentals: arrays, operations
- Pandas basics: DataFrames, Series, data manipulation
- Matplotlib: basic data visualization

Machine Learning Fundamentals

We will cover the **fundamentals** of **Machine Learning**, exploring various **ML techniques** including **supervised** and **unsupervised** learning methods.

Duration - 10-12 hrs

Chapter 1: ML Basics

- Introduction, types of machine learning
- ML workflow: Data exploration, preparation, model building

Chapter 2: Supervised Learning

- Linear regression, logistic regression, decision trees
- Model evaluation: accuracy, confusion matrix, cross-validation

Chapter 3: Unsupervised Learning

- K-means clustering, hierarchical clustering
- PCA for dimensionality reduction

Deep Learning Basics

This module introduces fundamental concepts of Deep Learning, essential neural network architectures, and frameworks.

Duration - 10 hrs

Chapter 1: Deep Learning Foundations

- Neural Networks and Activation Functions
- Training Neural Networks: Backpropagation, Gradient Descent

Chapter 2: Practical Deep Learning

- Introduction to frameworks (TensorFlow, PyTorch)
- Hands-on: Image classification project

GenAI for Business Transformation

Duration: 40 Hours

Outcome of this term: You'll gain hands-on experience in leveraging GenAI tools to optimize workflows, enhance customer experiences, and drive data-driven business strategies.

Module 1: Fundamentals of Generative AI for Leaders

- **Topics**: Overview of generative models and differences from traditional AI, real-world applications of **GenAI in business**, impact on business strategy.
- **Hands-on Case Study**: Analyzing successful GenAI applications in industry (e.g., customer service automation, content generation).

Module 2: Industry-Specific Use Cases of GenAI

Topics: Applications across industries:
- **Finance**: Fraud detection, automated reporting, investment insights.
- **Healthcare**: Drug discovery, medical imaging, patient personalization.
- **Retail/E-commerce**: Inventory management, recommendation engines.
- **Manufacturing**: Predictive maintenance, quality control.
- **Hands-on Exercise**: Develop a strategy proposal for implementing GenAI in a chosen domain (e.g., customer support chatbot for retail).

Module 3: AI-Driven Decision Making

- This module examines how **AI can augment decision-making processes** in organizations.
- It covers data-driven decision-making, predictive analytics, and the integration of AI insights into business strategies.
- **Strategic Implementation of GenAI in Business**.

Module 4:
Workflow Automation using GenAI

- Overview of GenAI in workflow automation.
- **Set up a Zapier** account and link it with Generative AI tools.
- **Hands-on** with Zapier to integrate GenAI into workflows.
- Compare automation tools with GenAI features and use cases.

Module 5:
GenAI in Sales and Marketing

- Overview of GenAI applications in sales and marketing.
- Personalized content creation.
- **Lead scoring** and qualification.
- Customer segmentation.
- Automated email responses.
- **Predictive analytics** for customer behavior
- **Hands-on project**: Build a GenAI-driven campaign for targeted marketing.

Module 6:
GenAI Tools & Applications for Software Development

- Overview of GenAI tools for code autocompletion, **language conversion**, code quality review, and automated testing.
- **Applications**: Code autocompletion, code refactoring and optimization, code translation, **code quality review**, automated testing.

Module 7:
GenAI in Customer Services and Operations

- Overview of GenAI applications in customer service and operations.
- Automated chatbots for customer support, **Personalized response generation**, Predictive maintenance in operations.
- Workflow automation, Customer feedback analysis.
- **Hands-on project**: Design a GenAI-powered customer support assistant for quick query resolution

Module 8:
GenAI in Data Analytics

- Overview of GenAI in data analytics.
- Data cleaning and preprocessing, Automated data insights, Predictive analytics.
- **GenAI integration with Sheets and Excel for data analysis.**
- **Hands-on project**: Build a GenAI-powered dashboard for business insights.

Advance GenAI For Tech Managers

Duration: 60 Hours

Outcome of this term: This term provides a foundational understanding of deep learning and large language models while emphasizing ethical AI practices and business integration.

Module 1:
Deep Learning Essentials for GenAI

- Topics: **High-level understanding of neural networks**, backpropagation.
- Popular frameworks (TensorFlow, PyTorch) in the context of GenAI.
- **Hands-on Exercise**: Build an end-to-end process diagram for deploying a deep learning-based GenAI solution within an organization.

Module 2:
Prompt Engineering for Managers

- Topics: Fundamentals of crafting effective prompts, strategies for optimizing AI responses.
- **Prompt templates** for different business use cases, basics of prompt chaining.
- **Hands-on Exercise**: Design and test prompts for a customer FAQ assistant or internal knowledge base tool.

Module 3:
Transformers and Large Language Models (LLMs)

- **Topics**: Introduction to transformers, attention mechanisms.
- Overview of LLMs (**GPT-3, ChatGPT, LLaMA**), business applications of LLMs.
- **Hands-on Project**: Customize prompts for a conversational AI model tailored to a company's customer service requirements.

Module 4:
Integration of OpenAI APIs

- **Topics**: Overview of OpenAI API capabilities.
- Data handling best practices, rate limits, **error handling**, compliance, and data privacy.
- **Hands-on Project**: Develop a high-level prototype for a web application using OpenAI API for content generation based on user inputs.

Module 5:
Building Applications with LangChain for Business Use

- **Topics**: **LangChain's** utility for workflow automation, sequential, memory, and conditional chains for **task-based** applications.
- **Hands-on Project**: Build a workflow prototype for automated report generation using LangChain.

Module 6:
Retrieval-Augmented Generation Fudamentals (RAG)

- **Topics**: Basics of RAG, combining generative and retrieval techniques for enhanced information recall.
- **Use cases for RAG in business.**
- **Hands-on Project**: Implement a RAG-based assistant to answer questions from an internal company FAQ or policy document dataset.

Module 7:
Introduction to Agentic AI

- Understanding Agentic AI and **Autonomous Agents**
- Core principles of agentic systems (Autonomy, Goal-oriented behavior, Decision-making)
- **Use cases in business and technology**

Module 8:
Key Components of Agentic AI

- Task Management and Automation
- Planning, Execution, and Optimization
- **Decision**-**making** frameworks
- Practical demonstration using **LangChain**

Module 9:
Essential Tools for Agentic AI

- **LangChain**: Introduction and hands-on exercises
- **AutoGPT**: Setup and practical application
- **BabyAGI**: Basic usage and task automation
- **CrewAI**: Introduction and practical demonstrations

Module 10:
Agentic AI Integration

- Integrating agents with **OpenAI** APIs
- Building custom agents for specific tasks
- **Hands-on session** with OpenAI's GPT models

Real-world Projects

- **Project 1:** Build an autonomous assistant to automate content generation and social media posting using AutoGPT and LangChain.

- **Project 2:** Develop an intelligent customer support agent that autonomously handles FAQs and escalates complex queries using BabyAGI and GPT API.

- **Project 3:** Create collaborative workflows and team-based tasks automation using CrewAI.

Module 11:

Overview of Model Deployment and Scalability

- **Topics**: Overview of model deployment techniques, best practices for production environments.
- **API setup**, scaling and monitoring model performance.
- **Hands-on Project**: Create a deployment strategy for a customer service chatbot, including model hosting, load balancing, and monitoring requirements.

Module 12:

Ethical Considerations in AI for Leadership

- **Topics**: Discussion on ethical AI practices, **bias detection** and mitigation, privacy concerns, responsible **AI usage**.
- Implications for leadership decisions.
- **Hands-on Case Study**: Conduct a risk assessment for an AI initiative to evaluate potential ethical challenges and suggest mitigation strategies.

Executive-level real-time **Industrial Projects (Electives)**

#1

Sales Forecasting Using Generative AI
20 hours

- **Objective**: Develop a generative AI-based sales forecasting model tailored for decision-making in retail or FMCG domains.

- **Outcome**: Learners will create predictive sales reports and simulate scenarios for strategic planning.

#2

Employee Engagement Chatbot
20 hours

- **Objective:** Build a conversational AI chatbot that provides personalized employee feedback, wellness suggestions, and engagement insights.

- **Outcome**: Managers will learn to enhance HR processes using AI-driven solutions

#3

Strategic Decision Automation for Supply Chain
20 hours

- **Objective**: Create an AI system that generates actionable insights and strategies for inventory optimization and logistics planning.

- **Outcome**: Learn to automate decision-making processes, ensuring cost efficiency and reduced lead times.

#4

AI-Powered Personalized Marketing Campaigns
20 hours

- **Objective:** Design a GenAI tool to create personalized ad campaigns and content suggestions

- **Outcome:** Learn how to leverage AI to boost ROI through targeted and data-driven marketing strategies.

Note: Pick any two

Thank **you!**

For more queries and information
please reach out to us at:

+91 77956 87988

Visit us at
www.learnbay.co