

# GenAI Developer Certification for Professionals

Master Generative AI and Redefine Your Career Path

In collaboration with



*100% Live Online Session With Experts*

 **Work on 10+ GenAI Projects**



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## Message from CEO, Learnbay

As Learnbay's CEO, I'm excited to welcome you to an amazing journey in learning. Here at Learnbay, we're all about helping you grow in Data Science and more. We think learning can open up endless chances for everyone.

We're not just about the usual school stuff; we're here to support your career in every way possible. What makes Learnbay special is how much we care about your success. I'm inviting you to start a great learning journey with us. Come be a part of Learnbay and see how dedication and passion can really change your path to being the best.

## Message from Principal Investigator, E&ICT Academy IIT Guwahati (Dr. Gaurav Trivedi)

As the principal investigator at E&ICT Academy IIT Guwahati, I'm happy to support and work with Learnbay on their Data Science and AI course.

We at E&ICT Academy IIT Guwahati, aim to lead the way in learning and research in Data Science and Artificial Intelligence.



I wish you all good luck with your studies at Learnbay and am excited to see how you all do and grow in the interesting areas of Data Science and Artificial Intelligence

# About Course

This certification is for **software developers or programmers** who want to deepen their knowledge of **Generative AI**. It uses a **project-based approach**, with guidance from industry experts and a dedicated mentor.

The course also covers **Large Language Models, OpenAI APIs, LangChain, RAG for developers**. By the end, you'll be ready to integrate AI & ML in software development and prepare for AI engineering interviews.

## Our **Commitment**

"Equip tech professionals and developers 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



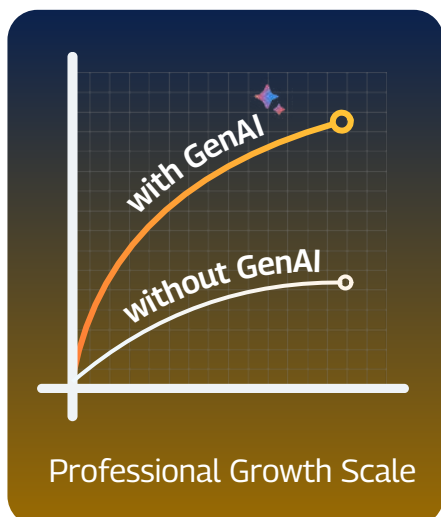
**350+**  
Hiring Partners



**7+**  
Centers Across India



**40k+**  
Professionals Upskilled



## 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.



# Program **Summary**



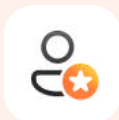
## Program Eligibility

Tech professionals having **2+ years** of experience.



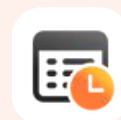
## Training Mode

**100% Live Online**  
Interactive Program



## Program Faculty

Industry Experts and  
**E&ICT Academy, IIT Guwahati Professors**



## Program Duration

**3.5 Months** Program  
with Live Projects



## Payment Options

**No cost EMI,**  
Interest free loan



## Certification

Certification from  
**E&ICT Academy, IIT Guwahati**

Exclusive

## GenAI-Applied Learning Experience

### Hands-On Development

Execute a GenAI project  
end-to-end.

### Collaborative Experience

Team up to build and  
deploy solutions.

### Industry Impact

Tackle real-world  
GenAI applications.

### Advanced Skills

Practical knowledge  
in GenAI integration

**Important Note:** Join a team of 4-5 developers to build and deploy a GenAI solution, gaining leadership and teamwork skills in a project environment.

# Program Eligibility

**2+ years of  
work exp.  
in Tech**



## Course Prerequisites

You should have a basic understanding of **Python, Machine Learning, & 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 Tools + Frameworks**

Learn OpenAI APIs, LangChain, Hugging Face, and more to build intelligent applications effortlessly.



### 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 Developer Certification for Professionals**



## E&ICTAcademy, IIT Guwahati Certification

Stand out with a prestigious certification from **E&ICT Academy, IIT Guwahati**.

Get Certified  
from



## 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 advanced skills.



## Personalized Support

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

# Alumni Spotlight



Shravanthi A  
Data Scientist

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.

**Mechanical  
Domain**



**Data Scientist @**



 **230%**  
Salary Hike



Preksha Mishra  
Lead Data Scientist

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.

**Telecom  
Domain**



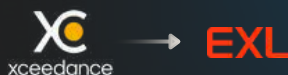
**Data Scientist @**



 **140%**  
Salary Hike



Karan Chawala



Data Scientist



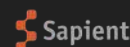
Jaya Sinha



Senior Analyst



Shubham Dev



Lead Data Analyst



# Alumni Spotlight



Mohd. Israr  
**Data Scientist**

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.

**Mechanical  
Domain**



**Data Scientist @**



 **230%**  
Salary Hike



Saurabh Kumar  
**Data Scientist**

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.

**Mathematics  
Professor**




**Data Scientist @**  **Teleperformance**

 **135%**  
Salary Hike



**Aravind**

 TheMathCompany → **CATERPILLAR**

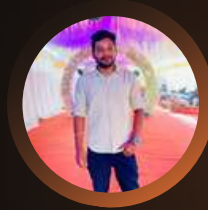
**Data Scientist**




**Ritesh Kumar**

 unacademy → **Capgemini**

**Senior Analyst**



**Ramki**

 cognizant → **ANBSYSTEMS**  
#DNY company

**Data Analyst**

# Get Certified and accelerate your career growth

## E&ICT Academy, IIT Guwahati



## Certification from E&ICT Academy, IIT Guwahati

- ✓ Executive Certification: Earned in DS & AI from E&ICT Academy, IIT Guwahati.
- ✓ Hands-On Experience: Practical learning at E&ICT Academy, IIT Guwahati.
- ✓ Top Faculty: Learn directly from E&ICT Academy, IIT Guwahati experts.

## Program Fees

### Live online classes

#### Benefits:

- ✓ All classes are covered in live interactive mode
- ✓ Schedule doubt clearing session with industry expert
- ✓ Online capstone project session
- ✓ 1 on 1 Job assistance with online resume build up and mock interview sessions

#### Program Fee

₹ 75,000 + 18% GST

Pay in easy EMIs starting as low as

₹ 4,916/ month




# Certification Curriculum

GenAI Developer Certification  
For Professionals

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 [www.learnbay.co](http://www.learnbay.co)

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# GenAI Developer Certification for professionals

**Duration: 70 Hours - 3.5 Months**

**Outcome:** Master advance GenAI tools like TensorFlow, PyTorch, OpenAI APIs, and LangChain, frameworks, and real-world applications to **lead AI-driven projects** confidently.

## Topic 1 4 hours

### Fundamentals of Generative AI

Overview of **generative models** and their real-world applications, highlighting differences from traditional AI.

## Topic 2 4 hours

### Use Cases of GenAI in Various Industries and Domains

- **Finance:** Fraud detection, automated report generation, and investment insights.
- **Healthcare:** Drug discovery, medical image analysis, and personalized treatment.
- **Retail and E-commerce:** Personalized recommendations, inventory management, and customer service automation.
- **Manufacturing:** Quality control, predictive maintenance, and process optimization.

## Topic 3 4 hours

### Deep Learning Foundations for GenAI

- **Neural networks** and deep learning basics, Backpropagation and optimization techniques
- Overview of popular deep learning frameworks (TensorFlow, **PyTorch**).
- **Hands-on Project:** Build a basic image classifier using CNNs with TensorFlow or PyTorch, applying optimization techniques learned.

## Topic 4 4 hours

### Prompt Engineering and optimisation

- Strategies for crafting effective **prompts to optimize AI** responses and improve user interaction
- Techniques for prompt optimization and **prompt chaining**.

## Topic 5 4 hours

### Transformers and Attention Mechanisms

- Introduction to transformers and self-attention, **BERT, GPT**, and other transformer-based architectures, Hands-on exercise: Fine-tuning a transformer model for text generation.
- **Hands-on Project:** Fine-tune a transformer model on a custom text dataset for a text classification or summarization task.

## Topic 6 4 hours

### Large Language Models (LLMs)

Overview of LLMs like GPT-3, ChatGPT, and **LLaMA**

Fine-tuning LLMs for specific use cases, Applications in chatbots, summarization, and **sentiment analysis**.

**Hands-on exercise:** Design and deploy a conversational AI model that simulates a customer service assistant for a chosen domain (e.g., retail or tech support).



## Topic 7 4 hours

### Integration of OpenAI APIs

- Techniques for effectively integrating **OpenAI APIs**, including authentication and best practices for data handling. Rate limits and error handling.
- **Hands-on Project:** Develop a web app that uses OpenAI's API for content generation based on user inputs, including authentication and error handling.

## Topic 8 4 hours

### Building Applications with LangChain

- Overview of **LangChain's** functionality for large language models.
- **Chain concepts:** sequential, memory, and conditional chains, Creating custom prompts and workflows.
- **Hands-on Project:** Personalized Financial Advice - Based on customer profiles (age, income, risk appetite), offer tailored financial advice or investment recommendations.

## Topic 9 4 hours

### Utilizing Hugging Face

- Accessing and deploying **Hugging Face** pre-trained models, **Fine-tuning models** on custom datasets, Using Hugging Face's pipelines for rapid deployment, Introduction to Hugging Face's Model Hub and Transformers library.
- **Hands-on Project:** Fine-tune a Hugging Face model for a sentiment analysis task and deploy it using the Hugging Face API.

## Topic 10 4 hours

### GANs (Generative Adversarial Networks)

- Fundamentals of GANs and their components (Generator and Discriminator).
- **Variants of GANs** (DCGAN, StyleGAN, CycleGAN).
- Applications of GANs in image synthesis, art creation, and more.
- **Hands-on exercise**: Building a simple GAN for image generation.
- **Hands-on Project**: Build and train a DCGAN to generate new images from a specific dataset, such as handwritten digits or facial images.

## Topic 11 4 hours

### Variational Autoencoders (VAEs)

Introduction to VAEs and their architecture

Comparison of VAEs with GANs, Applications in **anomaly detection** and data compression.

**Hands-on exercise**: Building a VAE for image reconstruction.

## Topic 12 4 hours

### Retrieval-Augmented Generation (RAG)

- Introduction to **RAG**.
- How RAG combines generative and retrieval-based techniques, Implementing a basic RAG model for a knowledge-based task.
- **Hands-on Project**: Build a RAG-based FAQ Assistant to answer customer questions by retrieving information from a domain-specific FAQ dataset, merging retrieval and generation for clear, concise responses

### Topic 13 4 hours

#### Model Deployment for Generative AI

- Overview of model deployment techniques.
- Best practices for **deploying generative models in production**.
- Setting up APIs and scaling model infrastructure.

### Topic 14 4 hours

#### GenAI Copilot Tools for Coding

- Overview of GenAI Copilot tools and their applications in coding.
- **Hands-on with** GitHub Copilot, Tebnine, Amazon CodeWhisperer, Replit Ghostwriter, Codex (OpenAI)

### Topic 15 4 hours

#### Ethical Considerations in AI

**Discussion of ethical issues in AI**, including bias, privacy, and responsible usage in development.

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

## #1



### Financial Report Generator using GenAI tools

Automatically create clear financial reports from raw data like balance sheets. **LangChain** summarizes key insights, while **Hugging Face** helps with data analysis and clarity.

**Duration: 5 hours**

## #2



### Project Performance Dashboard

Track and analyze the progress of projects in real time. This tool provides insights into timelines, **budgets, and risks**, enabling better decision-making and project management

**Duration: 5 hours**

## #3



### Smart Hiring Tool for recruitment

A Generative AI-powered tool that screens resumes, matches candidates to **job profiles**, and drafts customized job descriptions. This tool will automate the **recruitment process** by understanding candidate profiles

**Duration: 5 hours**

## #4



### Customer Feedback Analyzer for e-commerce

This GenAI based tool will process customer **reviews and feedback**, identifying emotions, trends, and key themes. This insights will help to improve products, enhance customer satisfaction, and refine strategies.

**Duration: 5 hours**

# Thank you!

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

**+91 77956 87988**

Visit us at

**[www.learnbay.co](https://www.learnbay.co)**

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