

Applied Generative Al Course

Hands-on Learning Online Instructor Led Industry-Aligned





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A PROGRAM DESIGNED TO PREPARE YOU FOR THE FUTURE OF TECH

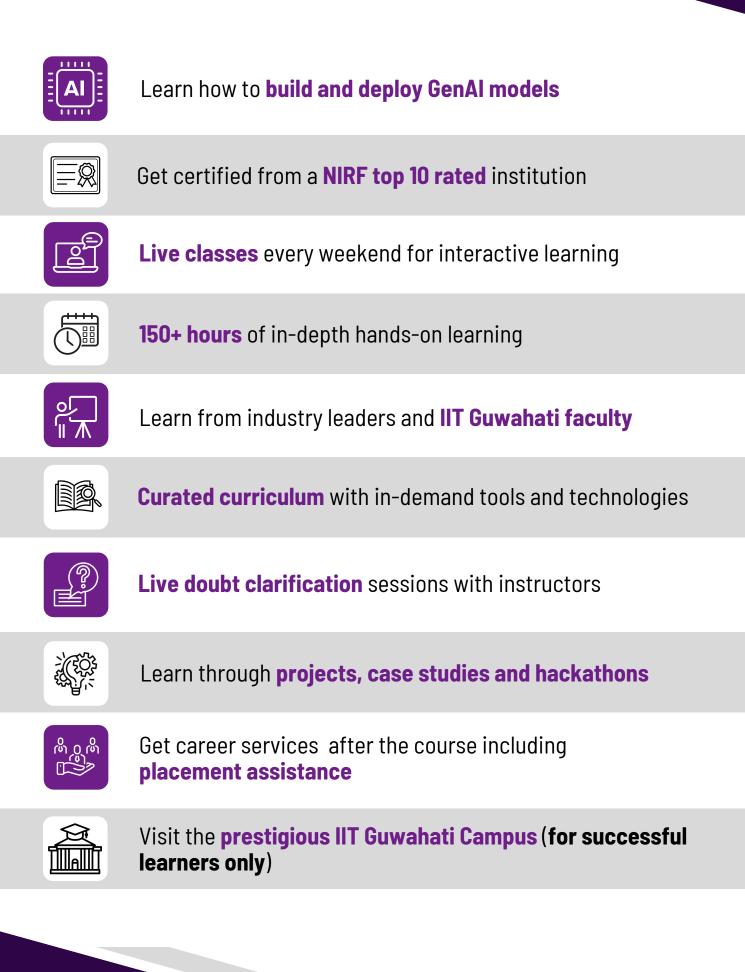
E&ICT Academy, IIT Guwahati's comprehensive Generative AI with RAGs and Llangchain course is tailored for individuals seeking to stay competitive in the evolving job market and unlock new opportunities for professional growth.

This hands-on program includes a curriculum that is carefully curated in consultation with the industry. The expert-led program helps you gain hands-on experience with cutting-edge tools and techniques, and enhance your career prospects in this rapidly expanding field.



In India, the demand for AI professionals has surged by **60%** in just the past year, with an anticipated **1.2 million** new jobs in AI-related fields by 2030.

PROGRAM HIGHLIGHTS



LEARNING PATH

Orientation **THE FUNDAMENTALS** Python **Exploratory Data Analysis (EDA) ML Models** Deep Learning(DL) and Natural Language processing(NLP) **Mini Capstone Project** Foundational Language Models, Fine tuning

PHASE II GENERATIVE AI

PHASE I

RAGs Agents, Vision and Deployment **Capstone Project**

Final Assessment

A visit to the prestigious IIT Guhawati Campus

An initiative exclusively for successful learners to expand their professional network.



Orientation

- Introduction to Curriculum & Program structure
- Getting familiar with the LMS
- A walk through of a GenAl product and the engineering behind it

Python Basics

- Lists, Tuples, Sets, Dictionaries
- Functions
- Lambda Functions,
- Higher Order Functions

Exploratory Data Analysis (EDA)

- Introduction to EDA
- Loading and Cleaning Data with Pandas
- Handling Missing Data
- Data Summarization (Descriptive Statistics)
- Univariate Analysis (Histograms, Box Plots)
- Bivariate Analysis (Scatter Plots, Pair Plots)
- Correlation Heatmaps
- Data Distribution Visualization (KDE, Distplots)
- Customizing Visualizations with Seaborn and Matplotlib
- Interactive Visualizations with Plotly

ML Models

- Introduction to Supervised Learning
- Regression
- Linear Regression
- Classification
- Logistic Regression
- Decision Trees
- Random Forests
- Support Vector Machines (SVM)
- Unsupervised Learning:
- Clustering

Deep Learning (DL) and Natural Language Processing (NLP)

- CNN and its working principal
- RNN and its types
- Tokenization
- Word embeddings
- Introduction to nltk
- Spacy libraries

Curriculum

Mini Capstone Project

• Presentation on given dataset for story telling and prediction

Foundational Language Models, Fine tuning

- Foundational Language Models
 - LLAMA3 Instruct 8B / 70B
 - LLAMA3 Chat
 - LLAMA3 code
 - E5 embedding
 - MIXTRAL 8X7B
- Para Efficient Fine-tuning:
 - LORA
 - P Tuning
- Fine-tuning of Embedding Models

RAGs

- RAGs
 - Chunking
 - Embedding
 - Search
 - Ranking
 - Generation
 - Evaluation
- RAG frameworks
 - LLANGCHAIN basics
 - LLAMAINDEX
 - LLANGRAPH

Agents, Vision, and Deployment

- Agentic workflows and function calling
 - LLANGCHAIN advanced
 - AUTOGEN
- Containerised deployment and Kubernetes
 - LLM deployment

Capstone Project

Curriculum

Learn In-Demand Tools and Technologies



20+ Projects and Case Studies for Hands-on Experience



Quill Blog Genie: Al-Powered Content Creation Assistant

Design a generative AI tool to assist content creators, bloggers, and social media managers in crafting high-quality content



Script-Master: Automated Script writer for Video Content

Build a tool to assist video creators for producing high-quality scripts tailored to their specific needs.



Revolutionize the way students learn by building highly personalized educational content.



Harmony-Hub: Generative Al for Real-Time Music Composition

Develop an advanced Generative Al system to play music in real-time, tailored to user inputs such as mood, genre, or specific instructions.



Pixel-Tales: Al-Generated Visual Storytelling Tool

Build an Al-powered tool to transform the way stories are told by combining narrative and visual elements.

CAREER SERVICES

Career services give you the boost that you need to grow your career in the field of Generative AI. We extend this support after the completion of the course.

Workshops on Workplace Behavioural Skills

Hone your personality to excel in a competitive work environment

Professional Profile Building

Learn how to build and optimise your resume and Linkedin profile to get access to career opportunities

Interview Preparation

Participate in mock interviews by industry professionals and gain confidence to face your next big interview

Industry Connect

Attend OdinTalk sessions every week and interact with industry experts to see how technologies are implemented

OdinSchool's Job Portal

Find the lastest 100+ job opportunities in Data Science and Al. Get shortlisted and crack that job

Mentorship

Get mentored by professionals and leverage the insights to transform yourself into a sought after professional

The Program Sets You on a Path for Multiple Job Roles



Al Developer



GenAl Developer



Data Scientist



ML Engineer



Applied Al Researcher

Al Architect

AI Consultant



Al Solution Devloper

*Career services are meant to assist you in your career progress. This is not a job guarantee program

ELIGIBILITY

You are eligible for the program if you are a graduate.

A background in mathematics or computer science and knowledge of Descriptive Statistics, Linear Algebra, SQL, and Python is preferred but not mandatory.

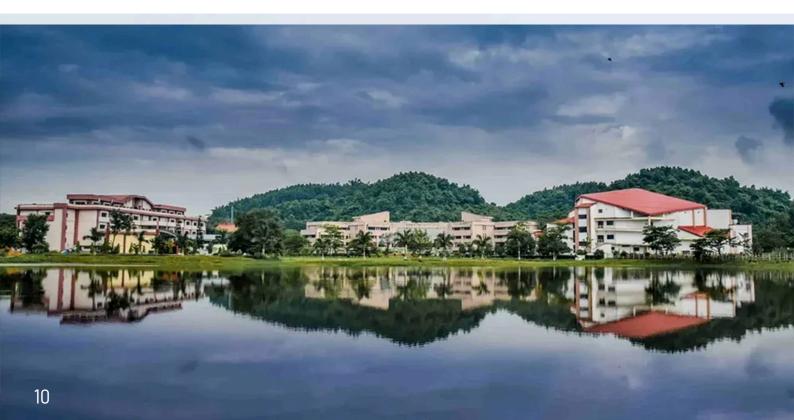
The program is highly recommended for working professionals in the below job roles:

Team leaders in tech companies
Python Developers
Database managers and administrators
Junior Data Scientists
Data Engineers



Generative AI has the potential to change the world in ways that we can't even imagine. It has the power to create new ideas, products, and services that will make our lives easier, more productive, and more creative. It also has the potential to solve some of the world's biggest problems, such as climate change, poverty, and disease. The future of generative AI is bright, and I'm excited to see what it will bring.

-Bill Gates



LEARN FROM THE EXPERTS



Dr. Gaurav Trivedi Principal Investigator E&ICT Academy, IIT Guwahati



Dr. Deepthi Chimalakonda Head - Carbon & Biodiversity Arkadiah Technology



<u>Amit Goyal</u> Senior Data Science Consultant



Dr. Sandeep Singh Lead Faculty OdinSchool



Dadavali Sheikh Senior Data Engineer LTI MindTree



Naval Yemul DataBricks Instructor DataBricks



Dr. B S A S Rajita Lead Faculty OdinSchool



<u>Abidunnisa Begum</u> Lead Faculty OdinSchool



<u>K Sangamesh</u> Founder and CEO KS Analytical Consulting

TESTIMONIALS AND SUCCESS STORIES

"Throughout my life, I've been fascinated by the realms of AI, inspired by its portrayal in science fiction and its real-world applications. This curiosity propelled me to delve deeper into the inner workings of these technologies, steering my academic journey toward a four-year immersion in Computer Science. However, despite my passion, I recognized a gap in the technical skills demanded by prospective employers. It was this realization that led me to OdinSchool, a pivotal decision that I am profoundly grateful for.

But it wasn't just about learning. OdinSchool also helped me get ready for the real world. Their career support was top-notch. From fixing up my resume to doing practice interviews, they had my back through it all."



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"I attribute much of my success to the comprehensive education and unwavering support I received throughout my journey with OdinSchool.

The teachers' unwavering support, personalized guidance, and willingness to go the extra mile ensured that I was never left wanting for assistance, even when grappling with complex concepts or challenging assignments.

Thank you, OdinSchool, for empowering me to realize my dreams and embark on a transformative journey of professional growth and fulfillment."

-Drishti Rawat, OdinGrad, Aug 2023

"The curriculum is prepared in such a way that even non IT guy can learn all these technologies and they start from basic then gears up to advanced topics. The trainers also have vast knowledge in their respective subjects and they will clear all your doubts in the session itself and even if you get doubts during practice then you will have doubt sessions every week where your doubt will be addressed.

My message to new joiners who are willing to join Odin School is they will provide each and every thing you need for your preparation but you have to be true towards your preparation and be patient."

-Thummaluru Haswanth, OdinGrad, May2023

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One aspect that truly sets Odin School apart is its commitment to fostering a supportive and inclusive learning environment. The faculty, comprising distinguished professionals and mentors, spared no effort in guiding and nurturing students every step of the way. Whether it was through insightful lectures, interactive workshops, or one-on-one mentoring sessions, they went above and beyond to ensure that each student reached their full potential."

-Subham Chowdhury, OdinGrad, Jan 2024

GET CERTIFIED BY E&ICT ACADEMY, IIT GUWAHATI



ENROLLMENT PROCESS



FEE AND SCHOLARSHIPS

INR 1,25,000 + GST

Contact us to avail Scholarships Easy finance and Zero-Interest EMI facility available



COURSE SNAPSHOT

START DATE:	Refer to the Course Page on the Website
ELIGIBILITY CRITERIA:	A Bachelors degree Math or Computer Science background and knowledge of Descriptive Statistics, Linear Algebra, SQL, and Python is preferable, but not mandatory
WEEKLY SCHEDULE:	Live online sessions on Saturdays and Sundays Doubt clarification, project reviews, and industry interaction on weekdays
SCHOLARSHIPS:	Scholarships and Flexible EMI options available. Reach out to our counselors for more details on +91 935 501 1033.

CONTACT

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OdinSchool, GreyCampus Edutech Pvt. Ltd., Aikya Vihar, Plot 218, B Block, Kavuri Hills Phase - II, Hyderabad - 500033 Website : www.odinschool.com Email: hello@odinschool.com Phone: +91935 501 1033

