Advanced Certificate Program in Generative AI in Association

with

E&ICT Academy
IIT Guwahati

Touch the Future:
Learn to Create Your Own Next-gen AI Models

IMARTICUS
L E A R N I N G

Mode of Learning
Live Online Sessions with
Learn & Apply Pedagogy +
Campus Immersion

Duration
6 Months
140+ Hrs of Training

Get Mentored By
IIT Guwahati
Faculty & Industry
Experts

Generative
AI for the Gen Next

Generative AI is exploding! Imagine AI composing music, writing poems, and designing buildings—not replicating but innovating. Companies like Open AI (ChatGPT, SORA), Microsoft (Bing and Coplilot), and Google (Gemini) are not the only ones making the news and expanding the market. Even India is in the race to make its own large learning model like Krutrim, Bharat AI, etc.

This USD 29 billion market (growing to USD 668 billion by 2030!) with CAGR of 47.5% is transforming industries:
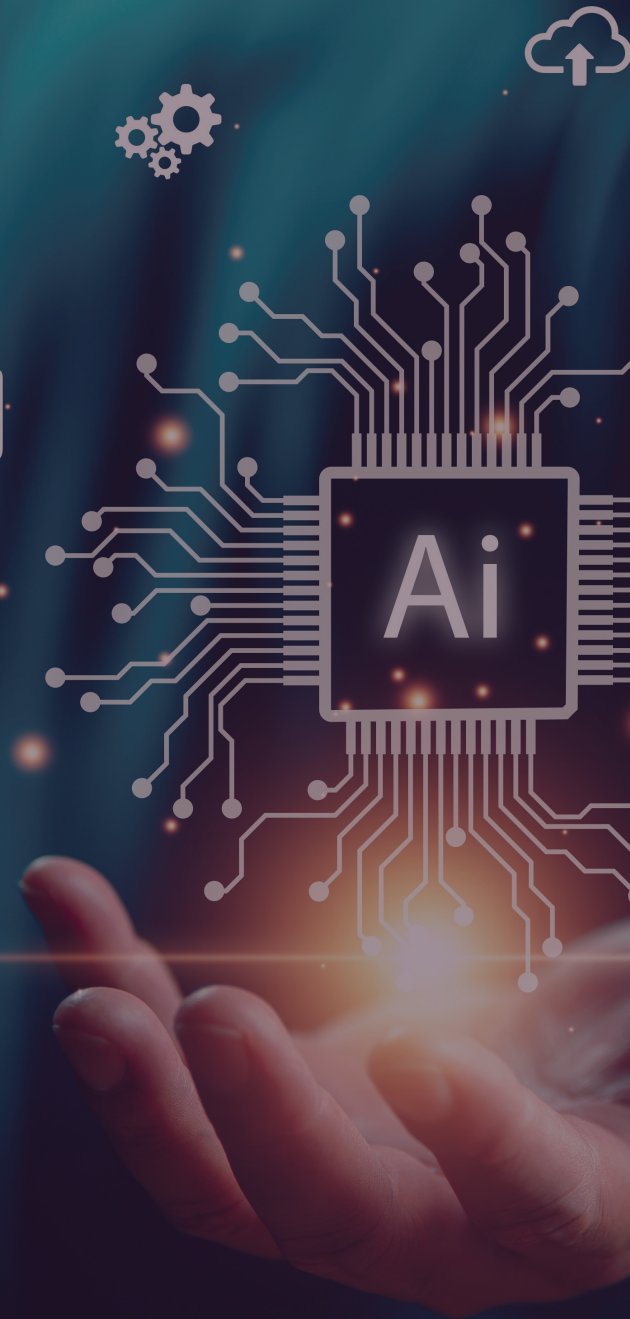
Content Revolution: Say hello to personalised learning materials, targeted ads, and AI assistants. Companies like Instructure and Microsoft are leading the charge.

Machine Learning Boost: Realistic data generated by AI trains models faster, leading to better healthcare (DeepMind's AlphaFold protein prediction) and finance (JPMorgan Chase's fraud detection) applications.

Creative Explosion: Artists collaborate with AI tools like Google's Magenta Studio, while architects use AI to design sustainable buildings like Arup's design assistant.

Generative AI isn't just a promising trend; it's a rapidly growing force transforming industries and creating exciting possibilities. By fostering responsible development, we can navigate its ethical complexities and unlock its immense potential for a better future

Ready to join the revolution? Dive into generative AI and unlock its vast potential!

Industry Overview

Generative AI is a fascinating intersection of creativity and technology. It uses algorithms to create captivating narratives, vivid landscapes, and intelligent dialogue for characters. This technology is already changing the world and creating new opportunities for those interested.

By prioritising responsible development, we can address ethical challenges and harness its vast potential for a brighter tomorrow.

Experienced professionals will guide you through exploring generative models, learning cutting-edge software, and delving into chatbots, data augmentation, and video synthesis.

Enroll in our program and equip yourself with the skills to create unique generative AI projects. By the end, you'll be ready to impress potential employers with your innovative work.

Join us today and step into the world of generative AI - where creativity and innovation know no bounds.

Some interesting facts you may not want to miss:

- Marketers anticipate 5-hour weekly time savings with generative AI.
- 70% of Gen Z tech users, with 52% trusting it for decision-making.
- **2 million** developers are working on apps built on OpenAI's platform.

Programme Highlights

Innovative Curriculum by IIT Guwahati & industry Experts

Experience the fusion of academic excellence and industry relevance. Dive into a top-tier learning environment to nurture the next wave of generative AI innovators.

Hands-On Learning with Industry-Prevalent Tools

Master the tools shaping the future of content creation. Dive deep into AI-powered text, image, and video creation with hands-on projects that make a real-world impact.

Live Sessions with IIT Guwahati Faculty & Industry Leaders

Attend live sessions with IIT Guwahati faculty & industry experts to learn about generative AI & gain valuable insights.

3-day Campus Immersion at IIT Guwahati

Join a 3-day campus experience at IIT Guwahati to explore the generative AI landscape and build connections with peers, faculty, and industry experts.

Access to LinkedIn Learning, iimjobs, & Hirist

Get 6 months of LinkedIn Learning for Generative AI concepts. Also, access iimJobs & Hirist for job recommendations and networking.

Prestigious Certification from E&ICT, IIT Guwahati

Earn a prestigious certification from E&ICT, IIT Guwahati, validating your expertise in generative AI. Elevate your career prospects with tangible proof of your knowledge and skills in this cutting-edge field.

Programme Curriculum

MODULE 01 — INTRODUCTION TO GENERATIVE AI

Dive into Generative AI! Understand models, types, and ethics. Explore real-world uses

- Understanding Generative AI
- Types of Generative AI models
- Assignment on Exploring Gen. AI Use Cases

MODULE 02 — TEXT GENERATION

Master text creation with AI! Craft poems, scripts, & chatbots. Explore neural networks, sequence models, and NLP. Build your own AI chatbot

- Introduction to Text Generation
- Sequence-to-Sequence Models
- Chatbot Development
- Project to build a basic chatbot using generative text models

MODULE 03 — IMAGE GENERATION

Unleash your inner artist with AI! Master GANs to create stunning images, explore styles, and build your generator. Paint with code!

- Generative Adversarial Networks (GANs)
- GANs for Image Generation
- Hands-on Image Generation
- Project to develop a tool to generate images using GANs

Programme Curriculum

MODULE 04   **DATA AUGMENTATION**

Supercharge your AI models! Learn data augmentation with code & tools to boost accuracy and creativity. Run a project to improve image classification models

- Data Augmentation Techniques
- Applications in Machine Learning
- Code Generation and Compilation
- Project on Data Augmentation Techniques

MODULE 05   **AUDIO GENERATION AND IVR PROJECT**

Learn audio generation, build an IVR system, and integrate them for next-level interaction.

- Audio Generation
- Building an IVR System
- Integration and Practical Application
- Project on audio generation

MODULE 06   **VIDEO GENERATION**

Learn video generation, fine-tune styles, and build your creative tool. Script to screen, powered by code

- Video Generation with AI
- Hands-on Video Generation
- Project on designing a tool for video generation

MODULE 07   **FINAL PROJECT AND PRACTICAL APPLICATIONS**

- Applying Generative AI in Real-world Scenarios
- Final Project and Showcase

Expert Faculty

Debanga Raj Neog
PhD | Assistant Professor

Dr. Debanga Raj Neog, an assistant professor at IIT Guwahati's Mehta Family School of Data Science and Artificial Intelligence, holds a Ph.D. in Computer Science from UBC, Canada, and a B.Tech in Electronics and Communication Engineering from IIT Guwahati, India. With over 14 years of experience, he specialises in computer vision, graphics, and machine learning, garnering awards like the Young Scientist Award and Mitacs Globalink Research Award. Formerly a co-founder of Nytilus Inc., he's contributed to esteemed journals and advises AI startups. Beyond academia, he's passionate about travel and engages in social outreach endeavours.

Ankur Singh Bist
PhD | Professor | Senior AI Consultant & Researcher

Ankur Singh Bist is a dynamic professional who is passionate about technology and innovation. With a background in computer science, he thrives in roles that demand creativity and problem-solving. Currently excelling in software development at Wipro Limited, Ankur has a proven track record of delivering high-quality solutions. His expertise spans across various domains, including web development and cloud computing. Ankur is committed to continuous learning and seeks to make meaningful contributions to the tech industry.

What Makes E&ICT Academy, IIT Guwahati Exceptional?

E&ICT Academy IIT Guwahati

Established in 1994, IIT Guwahati swiftly ascended to the esteemed IIT fraternity, commencing its academic programs in 1995. With 11 departments, 7 interdisciplinary academic centers, and 5 schools, the institute stands as a prestigious hub for engineering, science, and humanities disciplines, offering a diverse range of programs from BTech to PhD. Renowned for its world-class infrastructure, advanced research capabilities, and state-of-the-art scientific instruments, IIT Guwahati has been instrumental in nurturing India's cybersecurity talent.

Simultaneously, the Electronics and ICT Academy at IIT Guwahati is unwavering in its dedication to enhancing expertise across educational sectors. Focused on faculties in Engineering, Arts, Commerce, Science colleges, Polytechnics, etc., the Academy is committed to developing cutting-edge facilities. Offering short-term training programs in IT, Electronics, Communication, Product Design, and Manufacturing, these initiatives provide hands-on training and project work. Participants gain practical skills and knowledge for real-world applications by leveraging the latest software tools and systems, ensuring their readiness for the industry.

RANKINGS & RECOGNITIONS

7TH
Among India's
Top 10 Institutes

2ND
In Research Work

41ST
Globally In The 'Research Citations
Per Faculty' Category

395TH
In The QS World
University Rankings 2022

7TH
In India's Best
Engineering Institutions

1ST
University In 2019 Named
By HackerRank

Learning Experience

Interactive Live Sessions

Engaging real-time discussions and demonstrations.

Hands-On Practical Labs

Application of theory with industry tools.

Personalised Mentorship

Tailored guidance and individual support.

Collaborative Learning

Team activities fostering diverse perspectives.

Real-World Case Studies

Practical Application of Gen AI Principles.

Industry Insights

Guest lectures sharing current trends and practices.

Networking Opportunities

Expand connections for career growth.

Hands-On Learning with Case Studies

Building a Chatbot using Generative Text Models:
Participants will learn how to create a basic chatbot using generative text models.

Image Generation with GANs:
Participants will learn how to develop a tool to generate images using Generative Adversarial Networks (GANs).

Improving Image Classification with Data Augmentation:
Participants will learn how to apply data augmentation techniques to enhance image classification models.

Audio Generation and IVR Integration:
This session will cover Audio Generation Application and Interactive Voice Response (IVR) Integration.

Designing a Generative AI Video Generation Tool:
Participants will design a tool to generate videos using generative AI.

Final Project and Showcase:
Participants will design and implement a generative AI project and present it for evaluation in the final phase.

Programme Certification

Participants who complete the project and successfully meet the course completion criteria shall receive a certificate from E&ICT Academy, IIT Guwahati.

Certificate ID: EICT/101/2020-21/OCP/ML/071

Electronics & ICT Academy

Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India

Indian Institute of Technology, Guwahati

CERTIFICATE OF COMPLETION

This is to certify that Mr./Ms.

Tejaswini J

has successfully completed

"Advanced Certificate Program in Generative AI "

organised by E&ICT and the Indian Institute of Technology Guwahati
held from 2023 to 2023

Dr. Gaurav Trivedi
Principal Investigator
Electronics & ICT Academy
Indian Institute of Technology, Guwahati

Mr. Nikhil Barshikar
Managing Director
Imarticus Learning

This is an online certification programme conducted jointly by E&ICT Academy, IIT Guwahati and Eckovation towards upskilling.

Career Services by Imarticus

You will receive Career Assistance in terms of the following:

Resume and Linkedin Profile Building

Mock Interviews

Career Mentorship

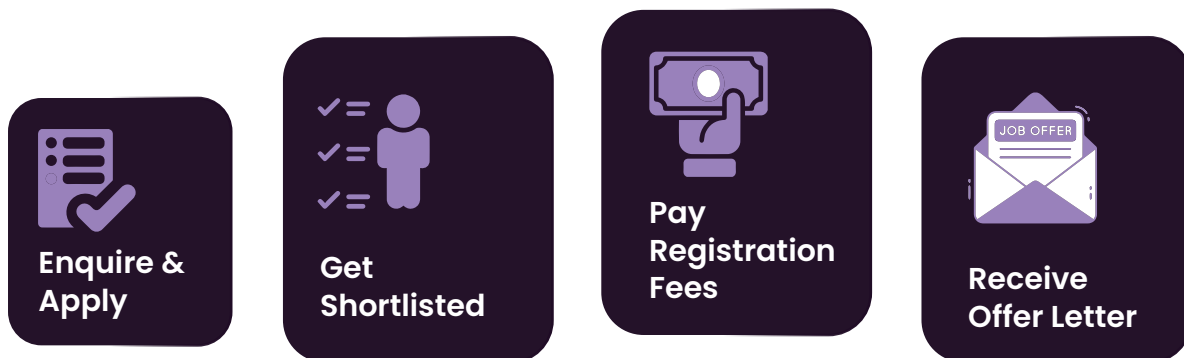**Six months of Pro Access to IIM Jobs & Hirist**

Six months of Premium Access to Linkedin Learning

Eligibility Criteria

- Bachelor's/Master's degrees in Computer
- Science/Engineering/Math /Statistics/Economics
- Minimum of 50% marks in graduation.
- Prior understanding of ML concepts is preferred
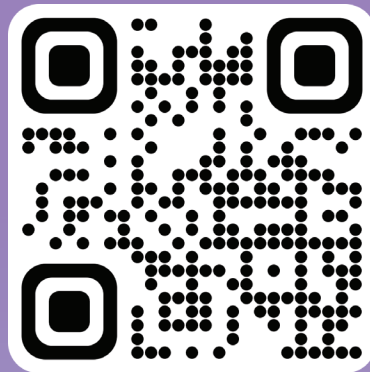
Admission Process

Enquire & Apply

Get Shortlisted

Pay Registration Fees

Receive Offer Letter

Fee Structure

Programme Fee

₹1,65,000 +GST

Registration Fee: ₹25,000 + GST

Instalment 1
₹ 50,000 + GST

Instalment 2
₹ 45,000 + GST

Instalment 3
₹ 45,000 + GST

**E&ICT Academy
IIT Guwahati**

Scan to know more

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Visit us at: imarticus.org