Objectives of the FDP

Faculty Development Program (FDP) focused on AI and Generative Models to enhance the knowledge and skills of faculty members, researchers and professionals in the field of Artificial Intelligence and Generative Models. FDP helps to explore new research ideas in interdisciplinary field, collaborate with peers, and contribute to the advancement of AI knowledge.

Topics covered

- Introduction to AI and GEN AI
- Introduction to Deep Learning, GAN, VAE models.
- Use of AI in Cyber Security.
- Introduction to NLP, RAG in LLM.
- Natural Language Processing (NLP) and Generative Models
- Autoencoders and Variational autoencoders and overview of GEN AI models.

Eligibility

The faculty members of AICTE approved Institutions, Universities, research scholars; participants from Government, Industry (Bureaucrats/ Technicians/Industry experts etc.) and professionals from R&D labs.

There is no registration fee and selection of the participants will be based on the first come first serve basis.
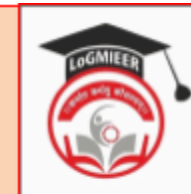
Resource Person

Sessions will be handled by eminent persons from reputed Institutions / research Labs/ Industries.

Registration

Registration must be done only through
http://bit.ly/4jxyLsU

It is mandatory to attend the test that will be conducted in the last day of the FDP related to the topics covered. It is also mandatory for the participants to have a minimum of 80% attendance and 60% marks in the test to earn the certificate.

Institution's Innovation Council & R&D CELL of LOGMIEER

Invite you for

Faculty Development Programme (FDP) On

AI and Generative Models
21st – 25th April 2025

Convenor
Dr. Kailas V. Chandratre.
Principal

Co- Convenor

Dr.Vishal R. Patil   Dr. Bajirao S. Shirole

Organized by

Loknete Gopinathji Munde Institute of Engineering Education and Research Nashik – 422001
https://logmieer.edu.in/

About The Institute

The "Dongre Vasti Gruha" is the landmark in Nashik City, located centrally and has been in existence as a "Sanstha" since 1920. It was re-established as "Krantiveer Vasantrao Narayanrao Naik Shikshan Prasarak Sanstha" in 1969, in memory of Vasantrao Narayanrao Naik, who participated in the freedom struggle and was a popular leader and visionary during the pre- and post-independence era. The administration of the entire Sanstha is looked after by a democratically elected setup, i.e., office bearers, trustees, and directors, who have a great vision for the development of educational infrastructure. Currently, sixty educational institutes are run by the KVNNSP Sanstha, including many primary and secondary schools, junior and senior colleges, industrial training institutes,Pharmacy College and a polytechnic, spread over a wide geographical area of Nashik district, out of which forty-two institutes are aided by the government of Maharashtra. Considering the needs of all socioeconomic classes of the region and the sustainable development of various communities, the "Loknete Gopinathji Munde Institute of Engineering Education & Research (LoGMIEER)" was established. The institute is affiliated with the University of Pune, with all necessary permissions from AICTE New Delhi, DTE Mumbai, and the Government of Maharashtra, and commenced its academic session in 2011.

Courses Offered By Institue:

- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Mechanical Engineering
- Artificial Intelligence and Machine Learning
- Information Technology
- MBA

About Institute Innovation Council:

The **Institute Innovation Council (IIC)** is an initiative by the **Ministry of Education** under the **Government of India** to promote innovation and entrepreneurship across educational institutions. The IIC aims to foster a culture of innovation, encourage students to develop creative solutions, and transform ideas into real-world applications.

The overall goal of the IIC is to build an ecosystem that encourages students to think critically, solve problems, and contribute to the country's innovation landscape. It is a part of the **Atal Innovation Mission (AIM)**, which is also aimed at driving innovation across India.

FDP on AI and Generative models

A Faculty Development Program (FDP) on AI and Generative Models. Covers the evolution of AI.FDP highlights the growth of generative AI models and their transformative impact across domains like cybersecurity.Introduces deep learning foundations including neural networks and activation functions. Explores generative models like GANs, VAEs, and diffusion models, highlighting the distinction between discriminative and generative approaches.FDP focuses on the use of NLP techniques in AI to understand and generate human language. Discusses generative language models (like GPT) and their applications in chatbots, content generation, and cyber threat intelligence.Provides a comparative look at key generative modeling approaches—GANs, VAEs, and diffusion models—along with their architectures, training methods, and use cases in image, text, and speech generation.

Below is the schedule for the FDP:

Scheduled from 21/04/2025 to 25/04/2025

Online (10:15 am – 12:45 pm)

Day 1 (21/04/2025)	Day2 (22/04/2025)	Day3 (23/04/2025)	Day4 (24/04/2025)	Day5 (25/04/2025)
10:15 – 10:45 Inauguration by Dr.Pramod Patil ,Dean Science and Technology,SPPU.				
10:45 – 12:30 Introduction to Artificial Intelligence , Rise, Usage and Application of Gen AI models.	10:15 – 12:30 Fundamentals of Deep Learning,Generative Adversarial Networks (GANs), Diffusion models and Variational Autoencoders (VAEs),Discriminative vs. Generative models	10:15 – 12:30 Introduction to AI in Cybersecurity, Role of AI and ML in modern Cybersecurity	10:15– 12:30 Introduction to Natural Language Processing (NLP),LLM,RAG in LLM	10:15– 12:30 Autoencoders vs. Variational Autoencoders,KL divergence and latent space,Overview of generative modeling techniques.
12:30 – 12:45 Attendance cum MCQ,Feedback & Interactions after every session, Vote of Thanks	12:30 – 12:45 Attendance cum MCQ,Feedback & Interactions after every session, Vote of Thanks	12:30 – 12:45 Attendance cum MCQ,Feedback & Interactions after every session, Vote of Thanks	12:30 – 12:45 Attendance cum MCQ,Feedback & Interactions after every session, Vote of Thanks	12:30 – 01:00 Attendance cum MCQ,Feedback & Interactions after every session, Valedictory Session & Vote of Thanks

Resource Person List for AI and Generative Models

Dr. S.No.	Title	Day & Date	Resource Person
1	Introduction to Artificial Intelligence Introduction, Rise, Usage and Application of Gen AI models.	Monday, 21/04/2025.	Dr.Parikshit Mahalle, Professor, Dean R & D , Vishwakarma Institute of Technology,Bibvewadi ,Pune.
2	Fundamentals of Deep Learning,Generative Adversarial Networks (GANs), Diffusion models and Variational Autoencoders (VAEs),Discriminative vs. Generative models.	Tuesday ,22/04/2025.	Dr.Pramod Bide, Assistant Professor, Sardar Patel Institute of Technology,Mumbai.
3	Introduction to AI in Cybersecurity, Role of AI and ML in modern Cybersecurity	Wednesday,23/04/2025	Mr.Kalyan Dani, Director ,Ram Antivirus Private Limited,Jalgaon.
4	Introduction to Natural Language Processing (NLP),LLM,RAG in LLM	Thursday,24/04/2025.	Dr.Yogesh Jadhav , Associate Professor, Atlas Skilltech University,Mumbai.
5	Autoencoders vs. Variational Autoencoders,KL divergence and latent space,Overview of generative modeling techniques.	Friday,25/04/2025	Mr.Swapnil Pawar, Assistant Professor, K. J Somaiya College of Engineering , Vidyavihar,Mumbai.
6	Attendance cum MCQ,Feedback & Interactions after every session		Dr.Vishal Patil/Dr. Bajirao Shirole
7	Valedictory Session & Vote of Thanks		Dr.Vishal Patil/Dr. Bajirao Shirole