AICTE Training & Learning (ATAL) Academy

The main objectives of the ATAL Academy are:

— To plan and help in imparting quality technical education in the country.

— To support technical institutions in fostering research, innovation and entrepreneurship through training in various emerging areas.

— To stress upon empowering technical teachers, technicians using Information & Communication Technology.

— To provide a variety of opportunities for training and exchange of experiences Such as workshops, Orientations, learning communities, peer mentoring and other faculty development programmes.

— To support policy makers for incorporating training as per requirements.

SAKEC

Vision:: To become a globally recognized institution offering quality education and enhancing professional standards**.**

Mission: To impart high-quality technical education to the students by providing an excellent academic environment, well-equipped laboratories and training through the motivated teachers.

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Target Audience: Assistant Professors/ Associate Professors/ Ph.D. Scholars/ PG students

PATRONS

Shri. Jayantilal Keshavji Chhadva
Chairman, Mahavir Education Trust

Shri. Navin Karamshi Shah
Managing Trustee, Mahavir Education Trust

Shri. Mansukh Laxmichand Shah
Trustee & Hon. Joint Secretary, Mahavir Education Trust

Dr. Bhavesh Patel
Principal, SAKEC

COORDINATOR

Dr. Pravin Vishnu Shinde
Head of Department AI & DS, SAKEC

CO-COORDINATOR

Ms. Pramila Shinde
Assistant Professor, IT, SAKEC

Shah & Anchor Kutchhi Engineering College

Mahavir Education Trust Chowk, W.T. Patil Marg, D P Rd, next to Duke's Company, Chembur, Mumbai, Maharashtra 400088

Accredited with 'A' Grade (2021) by NAAC for 5 years
Ranked in band 251-300 (2020) by NIRF

Sponsored by
AICTE Training and Learning (ATAL)

Faculty Development Programme
on

Generative AI & Data Science Applications

FREE OF COST

Organized by
Department of Artificial Intelligence and Data Science

Mahavir Education Trust's

Shah & Anchor Kutchhi Engineering College

Autonomous Institute Affiliated to University of Mumbai

Date: 2nd – 7th December, 2024
Venue: SAKEC, Chembur

ABOUT THE INSTITUTE

Accredited with 'A' Grade (2021) by NAAC for 5 years. After receiving appropriate recommendation from University of Mumbai, the University Grants Commission (UGC) has conferred autonomous status to Shah and Anchor Kutchhi Engineering College Mumbai, Maharashtra affiliated to University of Mumbai for a period of 10 Years from the academic year 2024-25 to 2033- 34. Academic autonomy offers a lot of freedom and flexibility in academics & conduction of examination.

The pursuit for excellence continues and is evident from the fact that all eligible UG programs have been accredited multiple times by the National Board of Accreditation (NBA) New Delhi. NAAC, in their meeting held on 20th October, 2021 has approved the evaluation of our college with a CGPA of 3.16.

ABOUT THE DEPARTMENT

The Department of AI & DS offers B.Tech. in Artificial Intelligence and Data Science. The department has well qualified, experienced and committed faculty to provide quality industry tuned education to the students. The Department Infrastructure fulfils the requirements of academics, supports research and learning skills on the latest technology in the industry.

ABOUT THE FDP

The objective of this programme is to impart knowledge on the basics, analysis and applications of Generative AI. Participation in this programme will be helpful for young teachers engaged in research works in the field of Generative AI and its application. This Faculty Development Programme will help faculties to Learn various Generative AI tools, and perform Prompt Engineering for AI tools.

OBJECTIVES OF THE FDP:

The objectives of this FDP are:

1. To understand Generative AI concepts, methods and technologies, architecture and applications.
2. To understand the underlying principle of generation new content based on a variety of inputs.
3. To understand different Generative AI tools to develop and deploy applications.

EXPECTED OUTCOMES:

After completion of this course, the participants should be able to:

1. Learn various Generative AI tools, and perform Prompt Engineering for AI tools.
2. Apply Generative AI concepts, methods and technologies.
3. Analyze various Generative AI techniques and apply them to solve real time problems.
4. Develop and deploy applications using Generative AI tools.

TOPICS COVERED:

1. Introduction to Data Science and AI
2. Fundamentals of Machine Learning
3. Deep Learning and Generative AI
4. Advanced Generative AI Techniques- Generative Adversarial Networks (GANs)
5. Data Science Applications and Ethical Considerations

ELIGIBILITY

Number of participants is limited to 50.

There is no course fee.

Selection of the participants will be based on the first come first serve basis.

Attendance for sessions is mandatory as per AICTE ATAL guidelines.

Exam will be conducted for certification.

TA to external participants will be provided as per AICTE ATAL guidelines.

REGISTRATION

Registration has to be done only through
https://atalacademy.aicte-india.org/signups
For more information, kindly visit
https://atalacademy.aicte-india.org/FAQs

Last date for receipt of registration form :
25-Nov-2024
Intimation of selection on or before :
27-Nov-2024

CONTACT DETAILS :

Dr. Pravin Vishnu Shinde, Coordinator
Email ID: pravin.shinde@sakec.ac.in
Mob: 8108735404

Ms. Pramila Shinde, Co-coordinator
Email ID: pramila.shinde@sakec.ac.in
Mob: 9820056656

Resource Persons

Dr. Bhushan Jadhav
Designation: Assistant Professor
Overview of Data Science, Introduction to Artificial Intelligence: Key applications

Dr. Pravin Vishnu Shinde
Designation: Assistant Professor
Supervised Techniques and Unsupervised Algorithms Learning, Model evaluation and validation techniques

Dr. Ramchandra Mangrulkar
Designation: Professor
Generative AI: Concepts, techniques, and applications

Dr. Madhukar Maruti Waware
Designation: Joint Secretary, University Grants Commission
NEP Implementation

Mr. Adnyesh Dalpati
Designation: Founder at Eureka Moment
Advanced Generative AI Techniques-Generative Adversarial Networks (GANs): Architecture and training, Applications of Generative AI and Data Science in various industries (healthcare, finance, education)

Mr. Vipul Patel
Designation: Director, MNC
Artificial Intelligence: Revolutionizing Industries with Generative Models, Variational Autoencoders (VAEs): Understanding and implementing VAEs

Mr. Yati Gharat
Designation: CTO
Litmus Information Systems
Role of AI in cyber security

Session wise FDP will be conducted offline (Free of Cost)

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
9:00 – 9:30 Inauguration				9:00 – 1:00 Industrial visit	9:30 – 12:00 NEP Implementation
9:30 – 12:00 Overview of Data Science	9:30 – 12:00 Supervised Techniques and Unsupervised Algorithms Learning	9:30 – 12:00 Deep Learning: Introduction to neural networks and deep learning frameworks (TensorFlow, PyTorch).	9:30 – 12:00 Generative Adversarial Networks (GANs): Architecture and training.		
12:00 – 1:00 Article Discussion	12:00 – 1:00 Article Discussion	12:00 – 1:00 Article Discussion	12:00 – 1:00 Article Discussion		12:00 – 1:00 Article Summary
1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch
2:00 – 4:30 Introduction to Artificial Intelligence: Key applications	2:00 – 4:30 Model evaluation and validation techniques.	2:00 – 4:30 Generative AI: Concepts, techniques, and applications.	2:00 – 4:30 Applications of Generative AI and Data Science in various industries (healthcare, finance, education).	2:00 – 4:30 Variational Autoencoders (VAEs): Understanding and implementing VAEs.	2:00 – 4:00 MCQ & Reflection Journal
4:30 – 5:30 case studies in AI and Data Science	4:30 – 5:30 Practical session: Implementing machine learning models using Python (libraries like scikit-learn).	4:30 – 5:30 Practical session: Building and training a basic neural network model	4:30 – 5:30 Hands-on project: Applying learned techniques to a real-world problem.	4:30 – 5:30 Practical session: Hands-on with GANs and VAEs for image generation.	4:00 – 5:00 Valedictory Session