AICTE Training and Learning
(ATAL) Academy

Faculty Development Programme (FD)

Faculty Development Programme (FDP)
On

AI Revolution: From Machine Learning to Generative AI







06th Jan, 2025–11th Jan, 2025



Host Institute

Yashwantrao Bhonsale Institute of Technology, Sawantwadi

Course Coodinator

Dr. Raman R. Bane

Principal, Yashwantrao Bhonsale Institute of Techology, Sawantwadi.

Course Co-Coordinator

Prof. Manoj Khadilkar

Assistant Professor, CSE Dept., YBIT, Sawantwadi.

OBJECTIVE OF THE COURSE

The primary objective of the FDP (Faculty Development Program) "AI Revolution: From Machine Learning to Generative AI" is to equip educators with a comprehensive understanding of the evolution and current advancements in artificial intelligence. The program aims to:

Enhance Knowledge: Provide a thorough overview of foundational machine learning concepts and the transition to cutting-edge generative AI technologies.

Foster Practical Skills: Develop hands-on experience with tools and techniques used in machine learning and generative AI, including data preparation, model training, and deployment.

Promote Integration: Enable participants to integrate AI concepts into their curriculum and research, enhancing the relevance and applicability of AI in their respective fields.

Encourage Innovation: Inspire educators to explore and contribute to the ongoing AI revolution, fostering a culture of innovation and critical thinking in AI applications.

COURSE CONTENTS

- > Overview of AI
- **Core Concepts of Machine**
- > Artificial Neural Networks (ANNs)
- > Convolutional Neural Networks (CNNs)
- Recurrent Neural Networks (RNNs) and Sequence Modeling
- ➤ Autoencoders and Variational Autoencoders (VAEs)
- **▶** What is Generative AI?
- **▶** Introduction to GANs
- **➤** Advanced GAN Architectures
- > Overview of Natural Language Processing (NLP)
- Generative AI in NLP: Transformers and GPT Models
- **Ethical Considerations and Future Trends**
- > AI Tools and Frameworks

ABOUT ATAL ACADEMY

Online ATAL academy is established with a vision to empower faculty to achieve goals of Higher Education such as access, equity and quality. The academy also help in imparting quality technical education in the country and support technical institutions in fostering research, innovation and entrepreneurship through training.

ELIGIBILITY OF PARTICIPANTS

Online ATAL FDP is open to regular faculty members of AICTE or UGC recognized educational institutions, technical universities/deemed universities and other research/ training institutions, Research Scholars, PG students and participants from Government, Industry (Bureaucrats/Technicians etc.).

REGISTRATION DETAILS

- ☐ There is **no registration fee** as the said programme is sponsored by AICTE Training and Learning (ATAL) Academy.
- ☐ Interested participants can register using the following link:

https://atalacademy.aicte-india.org/login

Step 1: Sign-Up

Step 2: Select the Role 'Participant'

Step 3: Click on Workshops

Step 4: Select 'Faculty Development Programme on

AI Revolution: From Machine Learning to Generative AI.

Generative A1.

Step 5: Click the plus sign button to register.

Participants will be selected on first come first serve basis.

RESOURCE PERSONS

Faculty and Experts from NITs, CDAC, MIT Bangalore, Tampere University Florida USA, University of Agder, Norway, Cognizant Pune, Quantiphi, Bangalore, etc.

INSTITUTE VISION

To be a leading institution in engineering education, empowering rural youth with quality technical education to become skilled professionals improving society.

ABOUT INSTITUTE (YBIT)

YBIT stands as a beacon of knowledge and learning, driven by a deep commitment to quality education, research, and holistic development. We believe in nurturing well-rounded individuals who possess not only technical expertise but also the skills to tackle real-world challenges and contribute meaningfully to society.

At our engineering college, we offer a comprehensive range of diploma and degree level programs across various disciplines. Our curriculum delivery is rigorous, relevant, and in line with industry trends, empowering our students with a strong foundation in engineering principles and practical experience. We strive to create an environment that fosters curiosity, critical thinking, and a passion for continuous learning.

Our distinguished faculty members, comprising experienced professors, industry experts are at the forefront of their fields. They bring their expertise and enthusiasm into the classrooms and laboratories inspiring students to push their boundaries and explore new horizons. We encourage students to actively engage with faculty, seek mentorship, and take advantage of the numerous opportunities for research and innovation.

Beyond academics, we believe in the holistic development of our students. Our campus offers state-of-the-art facilities, including well-equipped laboratories, modern classrooms, a comprehensive library, sports facilities, and a vibrant cultural hub. We encourage students to participate in extracurricular activities, clubs, and student organizations, enabling them to develop leadership skills, teamwork, and a

KEYPOINTS

- ☐ There is no Registration fee for any participant.
- \square The FDP will be conducted in online mode.
- ☐ Test will be conducted at the end of the programme.
- ☐ Participants will be selected on first come first serve basis. Selected candidates will be intimated by email only.
- ☐ The certificates will be issued to those participants who have attended the programme with minimum 80% attendance and scored minimum 60% marks in the test.
- ☐ Certificate will be issued by AICTE Training and Learning (ATAL) Academy.

ORGANIZING COMMITTEE

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Prof. Acharekar Suraj

Prof. Siddhesh Sawant

Prof. Mahabal Varun

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