Resource Persons:

Dr. Aatul Wadegaonkar,
Founder & Director, AW consulting, Pune

Dr. Santosh Sambare,
Associate Professor in Computer Engineering, PIMPRI CHINCHWAD COLLEGE OF ENGINEERING, PUNE

Dr. Gautam Borkar,
Professor, IT Department, Ramrao Adik Institute of Technology (RAIT), Navi Mumbai

Dr. V K Dalla,
Assistant Professor, Dept of Mechanical Engineering, NIT Jamshedpur

Dr. Vikul J. Pawar,
Assistant Professor, Government College of Engineering, Chhatrapati Sambhajinagar

Dr. Surendra Saini,
Associate Professor, Dept. of Mechanical Engg, University of Namibia, Windhoek, Namibia

Dr. Noor Faisal,
Assistant Professor, L. M. Thapar School of Management, Thapar Institute of Engineering and Technology, Mohali

Dr, Jahangeer Ali,
Assistant Professor, University of Nebraska–Lincoln, NE, 68588

Dr. Pravin Kumar Singh,
Associate Professor, Dept of Mechanical Engineering, Galgotias University Noida

Mr. Gajanan Kashide,
Sr. Design Engineer, Forbes India Pvt. Ltd. Chhatrapati Sambhajinagar

Dr. Tushar Choudhary,
Assistant Professor, Dept. of Mechanical Engg, IIITDM Jabalpur, MP

Dr. Nehem Tudu,
Assistant Professor, NIT Calicut

NO REGISTRATION FEES

Seats are limited and the participants are selected on first come first serve basis.

Registration

Registration is mandatory for attending the FDP. The participants are requested to register in the ATAL portal.

https://atalacademy.aicte.gov.in/login

The FDP will be held in ONLINE mode.

The certificates shall be issued by ATAL academy to those participants who have attended the program with minimum 80 % attendance and scored minimum 70 % marks in the test conducted at the end of the FDP.

ORGANIZING COMMITTEE

Faculty members of Mechanical Engg

Prof. B A Shukla,
Assistant Professor, Mechanical Department

Prof. D A Deshmukh,
Assistant Professor, Mechanical Department

Prof. G N Deshpande,
Assistant Professor, Mechanical Department

Prof. A V Kodarkar,
Assistant Professor, Mechanical Department

Prof. Z A Shaikh,
Assistant Professor, Mechanical Department

Prof. H B Chothe,
Assistant Professor, Mechanical Department

Shreeyash Pratishthan's
Shreeyash College of Engineering & Technology, Chh. Sambhajinagar

AICTE Training and Learning Academy (ATAL) Sponsored Faculty Development Programme on

AI-Driven Advances in Mechanical Engineering

One Week Online
10th Nov. - 15th Nov. 2025

Organized by
Mechanical Engineering Department
Shreeyash College of Engineering & Technology, Chh. Sambhajinagar
Contact No. 0240-6608716, 7903501064

About FDP

Coalescing AI with Mechanical Engineering is restructuring conventional processes and building up the future of industries and academia. With the increasing complexity of mechanical systems, extreme demand for automatic systems, and the need for error free data-driven decision-making, AI has become a crucial tool in fields such as digital manufacturing, condition -based and predictive maintenance, design analysis and optimization, robotics, quality control, energy optimization, and thermal system analysis and optimization. Even with significant advancements, challenges remain in AI integration, including the model's robustness, computational demands, ethical considerations, and data quality. This Faculty Development Program (FDP) aims to enhance the knowledge, skills, and professional growth of faculty members through training to incorporate AI tools and methodologies in their teaching, research, and industry collaborations. The FDP will serve as a platform for interdisciplinary learning in line with current industrial trends and academic requirements.

Programme Objectives

- To equip faculties, researchers, and professionals with the fundamental knowledge and tools needed to integrate AI into Mechanical Engineering.

- To learn practical tools and techniques of AI for solving mechanical engineering problems.

- To showcase proven case studies focusing on successful AI implementations inmechanical systems.

Target Audience

Faculty members from AICTE-approved engineering institutions across India, especially from Mechanical Engineering, Production, Mechatronics, Industrial Engineering, and allied Departments and Computer Eng -ineering.

Maximum participants: 100

About Shreeyash

Shreeyash Pratishthan's Shreeyash College of Engineering & Technology is a center of excellence for training and imparting knowledge and producing quality engineers in their specialized professional programmes. We provide an in-depth education in engineering principles built on mathematics, computation, and the physical, life sciences and encourage our students to apply what they learn through projects, internships and research. We are the first "NAAC ACCREDITED" engineering college in the Marathwada region and ISO 9001:2015 certified institute.

CHIEF PATRON

Er. Basawraj Mangrule
Chairman, Shreeyash Pratishthan

Col. Joy Daniel
CEO, Shreeyash Pratishthan

PATRON

Dr. B. M. Patil
Principal, Shreeyash College of Engineering & Technology

Co-ordinators

Dr. P. M. Ardhapurkar
Coordinator, Dean Academics, Shreeyash College of Engineering & Technology

Dr. H. A. Tonday
Co-Coordinator, HOD Mechanical, Shreeyash College of Engineering & Technology

Programme Outcomes

By the end of the FDP, participants will be able to:

- Learn the fundamental concepts of Artificial Intelligence and the Integration of AI tools in Mechanical Engineering.

- Implement AI-driven approaches in areas such as condition monitoring, digital manufacturing, CAD, quality control, and thermal and energy system optimization.

- Enhance the quality of classroom teaching by integrating contemporary AI tools in coding, simulation, animation and data driven problem solving in the field of mechanical engineering.

- Collaborate with experts and peers from industries and academics learning and future research endeavors.

Topics

1. Introduction to Artificial Intelligence and Machine Learning
2. Embracing Automotive systems with IOT & Artificial Intelligence.
3. AI-Driven condition monitoring and Predictive maintenance
4. Robotic Motion Visualization in manufacturing application using AI
5. Digital Twins: Opportunities and Challenges
6. Application of Artificial Neural Networks in Laser Beam Drilling
7. AI & Digital Manufacturing in Context of Industry 4.0 and its implementation
8. AI for sustainable development: Opportunities & Challenges
9. Application of AI in advancing welding technology
10. Gen-AI in CAD and Design Optimization
11. Emerging Renewable Technologies and Hybrid Systems: AI Tools for Optimal Energy Engineering.
12. AI based Real-Time Quality Control in Manufacturing Industry