KCG

COLLEGE OF TECHNOLOGY

AFFILIATED TO ANNA UNIVERSITY | AUTONOMOUS

SIX-DAY

Faculty Development Programme (FDP)

on

Artificial Intelligence and Machine Learning for Next-Generation Mechanical and Aerospace Engineering:

Innovations, Applications and Future Directions

(Online mode)

Date: 23rd – 28th November 2026



Jointly organised by the Departments of Aeronautical, Aerospace and Mechanical Engineering

KCG College of Technology

Karapakkam, Chennai–600097

CHIEF PATRONS

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COORDINATORS

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ABOUT THE FDP

The Faculty Development Programme on "Artificial Intelligence and Machine Learning for Next-Generation Mechanical and Aerospace Engineering: Innovations, Applications and Future Directions" aims to provide a comprehensive understanding of how AI and ML are transforming modern mechanical engineering practices. This FDP brings together educators, researchers and industry experts to explore emerging technologies, real-world applications, research opportunities and future trends. It emphasizes hands-on learning, practical insights and interactive discussions to equip faculty with the knowledge and skills required to integrate AI/ML in teaching, research and industry collaboration.

KEY TOPICS

- AI/ML Fundamentals and Data-Driven Engineering
- Machine Leaming Models for Engineering Prediction, Classification and Decision-Making
- Intelligent Sensing, Data Analytics and Feature Engineering for Engineering Systems
- Predictive Maintenance and Fault Diagnosis in Industrial Machinery and Aircraft Propulsion Systems
- AI-Driven Generative Design and Lightweight Component Optimization
- Machine Learning for CFD, Thermal Systems and Aerodynamic Performance Prediction
- Smart Manufacturing, Intelligent Machining and Industry 5.0
- Computer Vision for Defect Detection and Automated Inspection of Mechanical and Aerospace Components
- AI in Robotics, Autonomous Systems and Intelligent Drones
- Development of Digital Twin in Processing High Operating Temperature, Mechanical and Aerospace Materials
- AJ/ML for Renewable Energy, Sustainable Engineering and Green Aviation
- Emerging Research Frontiers, Challenges and Interdisciplinary Opportunities in AI/ML



ABOUT THE INSTITUTE

KCG College of Technology, Chennai, established in 1998, embodies the vision of its Founder-Chairman, Dr. KCG Verghese: "To make every man a success and no man a failure."A Christian minority institution, KCG College of Technology is an autonomous institution affiliated with Anna University and approved by AICTE, and accredited with NAAC A+ Grade. The college offers 15 undergraduate and 7 postgraduate programmes, and 8 departments have approval as Anna University Recognised Research Centres. Currently, six undergraduate programmes are accredited by NBA. With a QS I-GAUGE Diamond Rating, research centres, industry collaborations and innovation initiatives, KCG College of Technology fosters academic excellence and develops future-ready global professionals.



ABOUT THE DEPARTMENTS

The Departments of Aeronautical, Aerospace and Mechanical Engineering at KCG College of Technology are committed to excellence in engineering education, research and innovation.With experienced faculty, advanced laboratories and industry collaborations, the departments offer strong foundations in aircraft design, aerospace technologies and advanced manufacturing. Students actively participate in national-level technical competitions, innovative projects and research activities.The departments also have many funded projects and aided student projects supported by reputed agencies such as DST-IEDC, AICTE (RPS), IE(I), TNSCST, IIT PALS and NRDC, promoting practical learning, creativity and industry-oriented problem-solving.



WHO CAN PARTICIPATE

Faculty Members from AICTE-Approved Institutions, Universities, Research Scholars, Participants from Government, Industry (Bureaucrats/Technicians/ Industry experts, etc.), and Professionals.

How to Register

The Participant may complete his/her registration by filling out the online form and submit it along with his/her payment receipt.

Certificates

Certificates will be issued only to the participants who have a minimum of 80% attendance at the end of the FDP.

REGISTRATION DETAILS

SCAN & PAY

UPI ID : 86643601@ubin

₹ **200 Per Participant**

Last Date for Registration:
22nd November 2026

Registration Link

https://forms.gle/DAAevvy3P1iwmXK49

Scan to Register

RESOURCE PERSONS



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Mr.Ram Seetharaman

Building AI for Hardware Engineering
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