



Electronics & ICT Academy

IIT Roorkee

An Initiative of
Ministry of Electronics
& Information
Technology (MeitY)
Government of India

A Faculty Development Program on Artificial Intelligence and Machine Learning for Next Generation IoT Network

In association with

G H Raisoni College
of Engineering &
Management,
Nagpur



Jan 20 - Jan 25, 2025

(10:30 AM to 05:30 PM)

Register Before: Jan 17, 2025

Hybrid Mode

**Venue: G H Raisoni College of
Engineering & Management,
Nagpur**



Why this course ?

This course bridges the gap between AI & ML technology and next-generation IoT communication networking. Participants will gain foundational knowledge in AI and ML, and learn to handle, transform, and analyze advanced next-generation IoT data effectively. Hands-on skills will empower participants to implement data analysis, model-building techniques, and interdisciplinary perspectives to tackle real-world challenges using IoT and AI/ML technologies. It's ideal for those seeking expertise in next-generation IoT using AI/ML technologies.

Prerequisites

No experience is required, but fundamental knowledge of any programming language would be helpful.

Objectives of the course

The broad objectives of the course are:

- Explore IoT communication using AI/ML.
- Apply AI/ML to real-world challenges.
- Explore AI/ML integration in 5G and IoT.
- Promote interdisciplinary research and innovation.
- Bridge academia-industry knowledge gaps through practical exposure.
- Enhance problem-solving in emerging technologies.
- Demonstrate advancements in Next-Generation Internet of Things (IoT) Networks.
- Familiarize participants with IoT data frameworks and Cloud paradigms using IoT-ML.

Focus Areas

- Scope of AI/ML in 5G/6G communication networks.
- Research Challenges and Issues in 5G/6G Networks.
- Wireless technologies with AI integration.
- 5G-IoT-EDGE-ML/AI: Transformations.
- Academia-industry application alignment.
- Hands-on AI/ML tools and techniques.
- Cloud Computing and its Services.
- IoT Architecture and Protocols.
- Industry 4.0 (IoT) Applications.

Course Features

- 40 Hours of Lectures, hands-on, and Pedagogy/Industry sessions.
- Lectures from Expert Speakers, Hands-on from industry/Academia experts.
- Access to learning material and video lectures
- Certificate by E&ICT Academy IIT Roorkee

Course Outcomes

- Master AI/ML technologies for IoT networks.
- Gain skills in IoT data analysis and transformation.
- Integrate AI/ML with 5G/6G and IoT systems.
- Apply advanced data analysis and modeling techniques.
- Solve real-world challenges using IoT-ML frameworks.
- Utilize AI/ML tools, IoT architectures, and cloud services.
- Enhance research and innovation in emerging technologies.

Experts from Academia/Industry

Who Should Register?

Any Interested Faculty/PhD-Scholars
UG/PG/ & Industry Persons can register

Registration Fee

Fees: ₹ 250/- Faculty/Research Scholar/
Students

₹ 500/- Industry/Others

Note: Refund will be done in case of course
cancellation only, with in 20 working days

How to make Payment

Please make the payment first using the below link
upload the payment receipt when filling out the
Google registration form

<https://eict.iitr.ac.in/instruction-for-payment/>

Conference Code: EICTIITR-FDP-25-11

Registration Link

<https://forms.gle/92Aqfyxo8EA5on2V6>



Scan QR for
registration

Register before:
Jan 17, 2025

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Who may benefits

- Academic Faculty and Students(UG/PG)
- Government Officials.
- Working Professionals in the
Semiconductor Industry and Startups.
- Reasearch Scientists and Technical Staff.



This certificate can be considered in
alignment with other Quality
Improvement Programs (QIP) as well as
NBA and NAAC for recognition/credit.

Principal Investigator

Prof. Sanjeev Manhas
ECE Department, IIT Roorkee

Course Coordinators

- Prof. Sanjeev Manhas, IIT Roorkee
- Dr. Devashree Marotkar HOD &
Assistant Professor, Dept. of ECE,
GHRCEM, Nagpur
- Dr. Sanket B. Kasturiwala, Assistant
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