### About Electronics & ICT Academy at



### **PDPM IIITDM Jabalpur**

The Ministry of Electronics and Information Technology (MeitY), Government of India has instituted Electronics and ICT Academies in the year 2015. In the second phase, the academy at PDPM IIITDM Jabalpur aims at scalable training programmes in niche areas of Electronics and ICT for the development of the required knowledge base, skills and tools to unleash the talent of the Indian population. The Academy is identified by the MeitY as a hub of activities for capacity building through training, internships, research, and consultancy programmes in fundamental and advanced topics in electronics, information and communication technologies, the Academy conducts customized academic programmes for students, corporate sectors and researchers.

### **About SRM University-AP**

University-AP, Andhra Pradesh, is a SRM multidisciplinary research-intensive institute combining academic rigour, evolving research ecosystem, entrepreneurial heritage, and pioneering faculty. As a leading tertiary education institution, SRM University-AP has been challenging the conventional learning ecosystem since its inception to create a novel avenue where passion for wisdom meets purpose and excellence. The university strives to be globally connected, nationally relevant, and regionally transformative, honing the country's higher education standard. A high order of education in the fields of Engineering, Sciences, Management, Liberal Arts, Social Sciences, and Entrepreneurship is proffered in this interdisciplinary institution while prioritising the holistic development of students.

## Online Faculty Development Programme On

#### Integrating AI and Emerging Technologies in Next-Generation Network Systems

The course is designed to provide fundamental knowledge on recent developments in artificial intelligence (AI)-based network system design. The primary aim is to provide insights into developing intelligent, scalable, and adaptive network infrastructures for real-time applications. The sessions will highlight advancements in resource optimization, enhanced connectivity, and security frameworks. Participants will gain knowledge of cutting-edge AI-driven solutions for seamless integration of IoT, Cloud, SDN, Edge, and Fog computing technologies.

Who can attend: Suitable for faculty from colleges, universities, and technical and professional institutes can attend. Students, fresh graduates, researchers, and industry personnel working in allied disciplines can also attend.

#### **Important Dates:**

Last Date of Online Registration: 26th March 2025

FDP Dates: 2<sup>nd</sup> April to 12<sup>th</sup> April 2025 **Coordinators:** 

Dr. Munesh Kumar, IIITDM Jabalpur Dr. Kshira Sagar Sahoo, SRM University-AP Dr. Sambit Kumar Mishra, SRM University-AP

**Contact us:** 

academy@iiitdmj.ac.in, eict@iiitdmj.ac.in Mr. Durgesh Kushwaha : 7898670354 Faculty Development Programme On Integrating AI and Emerging Technologies in Next-Generation Network Systems

# Jointly Organized by SRM University-AP, India



and Electronics and ICT Academy IIITDM Jabalpur



An Initiative of the Ministry of Electronics and Information Technology, Government of India



#### Faculty Development Programme On Integrating AI and Emerging Technologies in Next-Generation Network Systems

Date: 2<sup>nd</sup> April to 12<sup>th</sup> April 2025 (online)

#### **Resource Persons**

- Dr. Mohit Kumar, NIT Jalandhar
- Dr. Munesh Singh, IIITDM Jabalpur
- Dr. Sambit Kumar Mishra, SRM-AP
- Dr. Tamoghna Ojha, IIT ISM Dhanbad
- Dr. Kshira Sagar Sahoo, SRM-AP
- Dr. Sanjaya Kumar Panda, NIT Warangal
- Dr. Yashwant Singh Patel, Umea university Sweden
- Dr. Rakesh Kumar Swain, SoA University
- Dr. Sourasekhar Banerjee, Uppsala University

### **Coordinators**

Dr. Kshira Sagar Sahoo, kshirasagar.s@srmap.edu.in SRM University-AP

Dr. Sambit Kumar Mishra, sambitkumar.m@srmap.edu.in SRM University-AP

Dr. Munesh Kumar, munesh.singh@iiitdmj.ac.in PDPM IIITDM Jabalpur

### **Course Contents**

- Distributed machine learning
- Federated Learning and Applications
- AI-Driven Workload Forecasting Trends for Cloud-Edge Computing
- ML/DL for collaborative cloud fog environment
- Reinforcement learning for IoT applications in integrated edge cloud computing
- Serverless computing in the cloud-to-edge continuum
- Applications for ML and AI in business
- Integration of AI in Cloud continuum
- Resource Allocation and Task Scheduling in Cloud and Edge Computing
- Role of feature selection in Cyber-attack Detection
- Explainable-AI for DDoS Defense System
- Comprehensive Fault Diagnosis in UAVassisted Sensor Networks

### Hands-On Sessions

- Hands on Session on Resource allocation and Task Scheduling in CloudSim.
- Hands on Session on Resource allocation and Task Scheduling in Azure.
- Feature selection in Cyber attack Detection

### **Programme Features**

- Application of artificial intelligence in various applications of Network Systems.
- Opportunities to connect with experts in the field.
- Instructor-led rigorous hands-on sessions with
- Online (live streaming) sessions.
- Certificate on successful completion with full access to the course material.

#### **Registration Details**

- Registration link: <u>https://forms.gle/Q7XmciKLTSsu5Hc18</u>
- Registration fee: 500 INR/- (For Online)
- Last Date for Registration: 26<sup>th</sup> March 2025

Seats will be allocated on a first-come, firstserved basis. Candidates will be issued satisfactory certificates on successful completion of the course.

### **Online Payment Details**

#### • Internet banking

Beneficiary Name	PDPM IIITDM Jabalpur
Bank Name	INDIAN BANK
A/C No.	50018692852
IFSC Code	IDIB000M694

• UPI ID: iiitdmj@indianbk

