### Organized by Electronics & ICT Academy



MNIT Jaipur http://www.mnit.ac.in/eict

## Online Programme

# "Cloud Analysis and Security"

September 8<sup>th</sup>- September 19<sup>th</sup>, 2025

#### **Faculty Development Programme**

**Electronics & ICT Academy under aegis of** 



meity.gov.in/content/schemes-projects

Chairman, EICT Academy & Director MNIT Jaipur Prof. Narayana Prasad Padhy

Chief Investigator, EICT Academy Prof. Vineet Sahula, ECE

Coordinator, EICT Academy Dr. Satyasai Jagannath Nanda, ECE

Co- Chief Investigators, EICT Academy Prof. Lava Bhargava, ECE Prof. Pilli Emmanuel Shubhakar, CSE Dr. Ravi Kumar Maddila, ECE

Objective (Electronics & ICT Academy-Phase II)

- 1) To conduct specialized FDPs for faculty/mentor training in line with the vision of MeitY by promoting emerging areas of technology and other high-priority areas that are pillars of both the "Make in India" and the "Digital India" programs.
- 2) To promote synergy and collaboration with industry, academia, universities and other institutions of learning, especially in emerging technology areas.
- 3) To support the National Policy on Electronics 2019 (NPE 2019) which envisions positioning India as a global hub for ESDM sector, including MeitY Schemes/policies such as Programme for Semiconductors and Display Fab Ecosystem; India AI; National Programme on AI, Production Linked Incentive Scheme for IT Hardware & Large-Scale Electronics Manufacturing; EMC; SPECS; Chips to System (C2S); etc.
- 4) To promote standardization of FDPs through Joint Faculty Development Programmes.
- 5) To support the vision of the National Education Policy (NEP 2020), which mandates that Indian educators go through at least 50 hours in professional development programmes per year.
- design, develop & deliver specialized **FDPs** on emerging technologies/ niche areas/ specialized modules for specific research areas for Faculty in Higher Education Institutions (HEI), besides FDPs on multi-disciplinary areas connected with ICT tools and technologies and other digital hybrid domains, covering a wide spectrum of engineering and non-engineering colleges, polytechnics, ITIs, and PGT educators.

The Electronics & ICT Academy at Malaviya National Institute of Technology (MNIT), Jaipur is one of the premier academies established by the Ministry of Electronics and Information Technology (MeitY), Government of India. under its national mission to enhance the skill levels in the areas of Electronics and Information & Communication Technology (ICT). The academy is part of a network of seven such academies across India. The academy aims to bridge the gap between industry demand and academic curriculum by providing specialized training and development programs for faculty members, industry professionals, government employees, and students. The academy conducts Faculty Development Programs (FDPs), workshops, and hands-on training sessions to foster excellence in teaching, research, and skill development. As the field is highly interdisciplinary and holds potential for high growth, the FDP program is open to all the participants interested in Cloud Analysis and Security. The faculty members of the E&ICT/ UGC approved institutions, research scholars, PG Scholars, Participants from the Government, Industry and staff of host institutions can attend the course. The course content will be delivered from a pool of experts on the subject from IITs, NITs, other Institutions of repute and experts from the industry. This FDP aims to provide the fundamental practical knowledge of Cloud Analysis and Security and their transformative applications in the healthcare sector. By attending this FDP, participants will be able to: A comprehensive understanding of fundamental theories, models, and algorithms essential to cloud analysis and security, In-depth coverage of advanced topics such as data protection strategies, access control mechanisms, virtualization security, and multi-cloud environment challenges, Practical exposure to simulation and modeling techniques addressing resource scheduling, cost optimization, and secure cloud architecture design, Critical analysis of limitations inherent in existing cloud infrastructures, alongside application of advanced security principles for developing scalable, efficient, and secure solutions through simulation-driven methodologies.

Experts/Speakers-

- Dr. Deepak Singh Tomar, Professor, NIT Bhopal
- Dr. Anurag Singh, Associate Professor, NIT Delhi
- Dr. Kunwar Pal, Assistant Professor, NIT Jalandhar
- Dr. Mushtaq Ahmed, Associate Professor & HOD CSE, NIT Jaipur
- Dr. Idris Afzal Shah, J&K
- Dr. Danish Ali Khan, Professor & HOD CSE, NIT Jamshedpur
- Dr. Jitendra Goyal, BIT Mesra

**Industry Experts** 

**Programme Modules:** 

Module 1: Fundamentals of Cloud Computing and Security Concepts, fundamentals, core security principles including confidentiality, integrity, and availability, common cloud threats including denial-of-service attacks, data breaches, and insider threats

**Module 2:** Security challenges in multi-cloud and hybrid cloud setups; secure application programming interface management; compliance and governance in cloud environments

**Module 3:** Algorithms for resource scheduling and workload balancing, cost and energy optimization methods, elasticity and scalability concepts in cloud computing, performance evaluation metrics, security-aware simulation and modeling techniques, designing secure and efficient cloud architectures using simulation

**Module 4:** Development of simulation-based projects addressing cloud security challenges; project presentations and peer reviews; discussions on emerging trends including container security, serverless computing security, confidential computing, AI-driven security frameworks, and zero trust security architectures

Module 5: Hands-on Lab Session, Panel Discussion and Valedictory

**Principal Coordinator:** 

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#### Registration:

Registration is open to faculty, working professionals, industry persons, doctoral, postgraduate and graduate students from India and rest of the world. Participants will be admitted on first-come first-served basis. Register online at- (<a href="http://online.mnit.ac.in/eict/">http://online.mnit.ac.in/eict/</a>)

#### Registration Fee:

Mode of programme	Academia (faculty/Students): India/SAARC/Africa	Others: India/SAARC/Africa	Rest of the world
Online	Rs. 500/-	Rs. 1500/-	US \$ 60/-
Classroom	Rs 2000/-	Rs 4000/-	

- (A) Fee once paid will not be refunded back.
- (B) The fee covers online participation in the programme, tutorial notes and examination, certification charges etc.
- (C) The registration amount may be paid through online mode-NEFT/UPI/Cards/SWIFT, provided at the registration portal.
- (D) Detailed schedule will be shared after receiving registration form.

For queries, email us at <a href="mailto:fdp.academy@mnit.ac.in">fdp.academy@mnit.ac.in</a>

