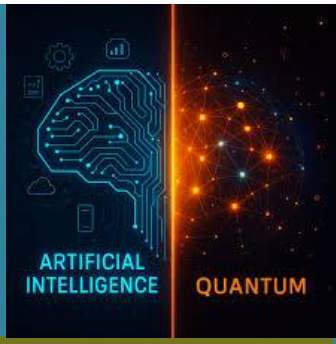
सत्यमेव जयते

Digital India
Power To Empower

Ministry of Electronics & Information Technology



Government of India Initiative for Capacity Building and Skill Development

Academicians & Professionals for Future Generation

- *Faculty Training*
- *National Policy on Electronics 2019 (NPE 2019)*
- *National Education Policy (NEP 2020)*
- *Services for Industry*
- *Technical Incubation and Entrepreneurship*
- *Continuing Education for Students & Professionals*

IIT Guwahati | IIITDM Jabalpur | MNIT Jaipur | IIT Kanpur | NIT Patna | IIT Roorkee | NIT Warangal

Training Programmes in 1st half 2026

India is fast emerging as a world power in Information, Communications Technology and Electronics (ICTE) sectors. To complement its growth and further development, there is an ever-increasing need for trained professionals with specialization in this space. This includes training of professionals not only in existing and changing technologies but also in the fields of R&D and electronics manufacturing. This will specifically be aimed at the ICTE sector to create a substantial resource pool of talent and generate ample opportunities for entrepreneurs. Ministry of Electronics & Information Technology (MeitY) has approved a scheme and setup Electronics and ICT Academies phase-II at 14 premier and leading institutions viz. IIT Guwahati, IIT Kanpur, NIT Warangal, NIT Patna and IIITDM Jabalpur, IIT Roorkee, MNIT Jaipur, 03 CDAC centres (Hyderabad, Mohali, Patna) and 03 NIELIT centres (Aurangabad, Calicut, Gorakhpur) and ICT Academy TN, Chennai. The outlay as 100% GIA, for period 2024-2029 is as follows.

Category	Total Outlay	Training Target Total (Faculty members)
14 Academies	Rs. 94.69 crore	1,35,000

These Academies are aimed at faculty/mentor development and upgradation to improve the employability of the graduates, diploma holders in various streams, through collaboration of States/Union Territories. The target beneficiaries are faculty Members in Engineering/ Science / Arts/ Commerce colleges/ academic institutions, including Trainers in Polytechnic, ITIs, and other PGT educators, including those candidates who are permitted to teach in these institutions.

Brief information about all the Academies is available at:
https://meity.gov.in/esdm/scheme-financial-assistance-setting-electronics-and-ict-academies

Activities of the Academies

- Faculty development for
  - Specialized training with hands-on on basic and advanced level topics for Engineering streams and
  - Domain based training on use of ICT tools and techniques for non-engineering streams
- Training and consultancy services for industry
- Curriculum development for industry
- Continuing Education programme for students / working professionals/ un-employed
- Design, Develop and Deliver specialized modules for specific research areas
- Providing advice and support for technical incubation and entrepreneurial activities
- To support the National Policy on Electronics 2019 (NPE 2019) which envisions positioning India as a global hub for ESOM sector
- To support the vision of the National Education Policy (NEP 2020

About Winter Courses

Online Training Programmes in core areas of Electronics and Information & Communication Technology (ICT) streams have been planned by academies for delivery during Winters (i.e., Jan-Jun 2026). All these Winter courses will be offered through online live web-conferencing, with instructor led live talks delivered by eminent experts from IITs, NITs, IIITs and other premier institutes/industries, even from within our country and abroad. Participants would be able to join online to web-conferencing platform using video/audio. For registration participants need to apply to any participating academy online through its website, as mentioned in details of respective programme,

How to apply:

* For a particular programme, a participant is encouraged to apply to respective coordinator at anyone of the seven Academies, participating in that programme.
* Government of India norms will be followed for SC/ST/EWS category participants.
* The application form is to be submitted in the online mode to the coordinator of the respective academy.

Note: Refer, programme offering Academies websites for complete contact address and other details of the courses.

Following programmes are being offered online jointly by EICT Academies in the 1st half of 2026, Jan - June 2026. Each of the programmes is of 10 days or more duration (40 contact hours).

Names of courses in First half 2026	Starting date	Completion date	Names of courses in Winters 2025	Starting date	Completion date
MG-03-Advanced Smart Grid	19 Jan	14 Feb 2026	AIML04: Special topics in AI: Generative AI for Computer Vision	09 Mar	19 Mar 2026
CBS-06-Next-Gen Cybersecurity: Trends and Technologies	02 Feb	13 Feb 2026	QT09- Engineering Foundations of Quantum Technologies	06 Apr	01 May 2026
QT07- Quantum sensing	06 Feb	28 Feb 2026	UHV-01-: Foundation course in human values & Professional Ethics	13 Apr	24 Apr 2026
ROB 01: Introduction to Robotics	9 Feb	20 Feb 2026	CBS-07-Cybersecurity Intelligence and Ethical Hacking Practices	20 Apr	01 May 2026
VLSI-01 – Fundamentals of MOS Device Physics & Nanoelectronics	9 Feb	20 Feb 2026	QT10- Solid State Physics for Quantum Technologies	04 May	29 May 2026
BLC-03-Blockchain Technologies and the Future of Decentralized Systems	17 Feb	31 Mar 2026	VLSI-04B- VLSI Design & Technology	11 May	22 May 2026
AIML-01-AI and Machine Learning: Foundations to Frontier Applications	23 Feb	09 Mar 2026	AIML-05: Agentic AI	18 May	29 May 2026
QT08- Quantum Materials	09 Mar	04 Apr 2026	QT11- Quantum Optics	01 Jun	26 Jun 2026
			IKS-01-Indian Knowledge System (IKS)	01 Jun	01 Jun 2026

Self-Paced programmes by EICT Academy IIT Kanpur for Jan-Jun 2026. Additional Online Live programmes in **Page 18**.

Self paced programmes		
Compiler Design, Analysis & Optimization	Basic Programming using Python	Cyber Security
Deep Learning with Generative AI for Computer	Full Stack Development with PhP & MySQL	Linux

Target Beneficiaries:

Interested Faculty/students of engineering/other institutions & professionals from our country as well as from outside India are eligible to attend these winter courses. Additionally, faculty of non-engineering background are also invited to attend FDP on Technology Enabled Teaching Learning Process & Institutes. Industry persons and student participants are also invited to attend the aforesaid programmes to upgrade their skills.

Availability of seats at each offering Academy:

Participants will be selected based on first-cum-first-serve basis by organizing the academy. Selected participants will be communicated through email / notified in E&ICT Academy websites. There is no limit on the number of participants, however, the only first 1000 participants would enjoy duplex both way video/audio abe to raise queries in real time. The rest of the participants would enjoy receiving video/audio in webcast mode.

Course duration:

Each course is designed as 3 credits equivalent for 40 hours (Theory Lectures, Hands-on/Design orientation/Activity linked problems/Assignments Problem Solving/Case Studies sessions/Quiz Tests). The contact hours are to be spread over 10 days, implying NOT more than 4 hours per day. At times, in order to support working professionals, the programmes are video-cast only at weekends.

Accommodation & Travel

There is no provision as well as no scope for Boarding and Lodging, as all the programmes are being offered ONLINE.

Registration Fee for each Winter Course:

No Registration fee is charged for attending these programmes. However, candidates from India/SAARC/African countries are required to pay a mandatory examination fee of Rs. 500/- (faculty/PhD-scholars/students) OR Rs. 1000/- (others), and US$ 60 or £ 50 from other countries if they desire a certificate of completion of programme. This Certificate for participation as well as for satisfactory performance will be given to the participants subject to fulfillment of attending the sessions, submission of assignments and clearing the test(s).

Mode of Payment: Preferred mode is ONLINE payment at respective Academy site.

Academy Name	Link for payment
IIT Guwahati	Online registration at web site of Academy, IIT Guwahati- http://www.iitg.ernet.in/eictacad/
IIITDM Jabalpur	Online registration at web site of Academy, IIITDM Jabalpur- https://ict.iiitdmj.ac.in/
MNIT Jaipur	Online registration at web site of Academy, MNIT Jaipur- https://www.mnit.ac.in/eict
IIT Kanpur	Online registration at web site of Academy, IIT Kanpur - https://eicta.iitk.ac.in
NIT Patna	Online registration at web site of Academy of NIT Patna- https://nitp-ict.ct.ws/
IIT Roorkee	Online registration at web site of Academy of IIT Roorkee- https://eict.iitr.ac.in
NIT Warangal	Online registration at web site of Academy NIT Warangal- http://nitw.ac.in/eict
ICT Academy TN	Online registration at web site of ICT Academy Chennai- https://ictacademy.in/pages/Upfdp.aspx

- Last Date for Submission of Applications is Monday of earlier week from the start date of respective programme.

The details of Online-Winter courses being offered during Jan-Jun 2026 is as follows.

1. MG-03-Advanced Smart Grid		19 Jan- 14 Feb 2026 5 -7 PM, Sat & Sun Off
EXPERTS/SPEAKERS- Prof N. P. Padhy MNIT Jaipur (Single Instructor-led programme)		
Principal Coordinator	**Joint- Principal Coordinators**	
Prof. N. P. Padhy, MNIT Jaipur fdp.academy@mnit.ac.in M: 8840 5454 38	Dr. B V Phani, IIT Kanpur bvphani@eicta.iitk.ac.in L: +91 512 679 6935	Dr. Sanjeev Manhas, IIT Roorkee eict@iitr.ac.in M: +91 9634766397
Joint- Principal Coordinators		
Prof. Gaurav Trivedi, IIT Guwahati trivedi@iitg.ac.in M: 94355 82802	Dr Sachin K Jain skjain@iiitdmj.ac.in M: 9425155406	Dr. Man Mohan Garg, MNIT Jaipur fdp.academy@mnit.ac.in M: 8840 5454 38
Dr. Amitesh Kumar amitesh.ee@nitp.ac.in M: 7840809129		
MODULES TOPICS-		
• Module 1: Introduction to power distribution networks, Difference between power transmission and distribution networks, the architecture of distribution networks, Impacts of DERs on distribution grids & its hosting capacity assessment, Operational challenges associated with DER-integrated distribution networks • Module 2: Introduction to distribution network load flow and sparsity quantification, Graphical load flow analysis of DER-integrated distribution networks, Load flow analysis with different load models, Three-phase power flow with unbalanced DER penetration, Example of load flow solution in OpenDSS platform	• Module 3: Introduction to reliability analysis, Probabilistic failure analysis of network components, Reliability metrics, Value of loss load calculation, System reliability enhancement technologies • Module 4: Concept of distribution system operator (DSO), Bidding mechanism for DSOs, Ancillary support from distribution grids to transmission networks, T&D market mechanism, Case study demonstration on T&D interaction • Module 5: Overview of advanced distribution management systems (ADMS), Smart Meters and Advanced Metering Infrastructure (AMI), Operation of distribution phasor measurement units (d-pmu), Distribution network restoration mechanism	• Module 6: Operation and control of DC Microgrid, AC Microgrid and AC/DC hybrid Microgrid, Hierarchical control techniques in hybrid AC-DC microgrid, Demand side management of smart grid, Demand Response Analysis of smart grid, Design of Smart Grid and Practical Smart Grid, Case Study Simulation and case study of AC Microgrid, DC Microgrid, AC-DC Hybrid microgrid • Module 7: Demonstration of solar power generation, wind power generation, Battery Management System, EV charging system, grid-connected DC microgrid, energy management in microgrid, PHIL experimentation for symmetric and asymmetric fault analysis of grid-connected DFIG wind turbine, ancillary support from virtual synchronous generator, peak energy management using energy storage system

2. CBS-06-Next-Gen Cybersecurity: Trends and Technologies 02-13 Feb 2026

EXPERTS/SPEAKERS- From IITs/NITs/IIITs and industries/organization

Principal Coordinator	Joint- Principal Coordinators	
Dr. B V Phani, IIT Kanpur bvphani@eicta.iitk.ac.in L: +91 512 679 6935	Prof. Srinivasan Krishnaswamy, IIT Guwahati srinikris@iitg.ac.in M: +91 789 6233 561	Prof. Sanjeev Manhas, IIT Roorkee eict@iitr.ac.in M: +91 9634766397
Joint- Principal Coordinators		
Dr. Vikash Kumar, MNIT Jaipur fdp.academy@mnit.ac.in M: 0141 271 5284		

MODULES TOPICS-

- Module 1: The AI Revolution (Offense & Defense)
  - Agentic SOC Operations: Shifting from manual alert monitoring to overseeing AI security agents that automate incident correlation and response.
  - Defending Against AI-Driven Social Engineering: Mitigating hyper-realistic vishing (voice clones) and deepfake video attacks.
  - Securing the AI Pipeline: Techniques to prevent Prompt Injection and data poisoning in enterprise LLMs.
- Module 2: Zero Trust & Identity-First Security
  - Beyond the Perimeter: Implementing "Never Trust, Always Verify" across cloud, edge, and hybrid environments.
  - Agentic Identity Management (IAM): Managing non-human identities and granting just-in-time permissions to AI agents.
  - Passwordless Ecosystems: Deploying FIDO-based passkeys and behavioral biometrics to eliminate credential-based theft.
- Module 3: Quantum Readiness & Advanced Encryption
  - The Quantum Threat: Understanding "Harvest Now, Decrypt Later" risks and the timeline for cryptographic disruption.
  - Transitioning to PQC: Implementing Post-Quantum Cryptographic algorithms (NIST standards) and achieving "crypto-agility."
  - Confidential Computing: Protecting data-in-use within hardware-based Trusted Execution Environments (TEEs).
- Module 4: Resilience & Emerging Attack Surfaces
  - Continuous Exposure Management (CEM): Moving beyond static annual audits to real-time, automated vulnerability validation.
  - Supply Chain & SBOM: Managing the Software Bill of Materials to secure open-source dependencies and third-party tools.
  - Cyber-Physical Systems (CPS): Securing IoT, 5G/6G infrastructure, and smart-grid technologies.

3. QT07- Quantum sensing

06-28 Feb 2026
3 -5 PM daily

EXPERTS/SPEAKERS- IBM experts

Principal Coordinator	Joint- Principal Coordinators	
Dr. Kamlendra Awasthi, MNIT Jaipur fdp.academy@mnit.ac.in M: 954 965 9179	Prof. Harshal Nemade, IIT Guwahati feroza.haque@iitg.ac.in M: +91 789 6233 561	Dr. Ritu Sharma, MNIT Jaipur fdp.academy@mnit.ac.in M: 954 9654 232
Joint- Principal Coordinators		

MODULES TOPICS-

- Classical sensing
  - Photo detection
- Classical noise
  - Johnson Noise, Telegraph noise, flicker or 1/f noise
- Sensitivity of classical measurements
  - Classical Fisher information
  - Cramer - Rao bounds (information theory basics may be required here).
- Quantum measurements
  - projective/orthogonal measurements
  - Approximate/non-orthogonal measurements
  - Weak continuous measurements
  - Error-disturbance relations
  - Standard quantum limits
  - Quantum non-demolition measurements
- States of light
  - Fock states
  - Coherent states
  - Squeezed states
  - Tomography
  - Wigner quasi-probability distribution
  - P-distribution
  - Husimi Q function
- Quantum photo detection
  - Square-law detectors, Intensity measurements and Photo-detection
  - Linear Detectors and Quadrature Measurements
- Quantum Cramer-Rao bounds
- Single photon-based sensing applications
- Entanglement based sensing applications
- Atomic state-based sensing, solid-state spin-based sensing applications (gravimetry, magnetometry)

4. ROB 01: Introduction to Robotics

09-20 Feb 2026
5-7 PM working day, & Saturday

EXPERTS/SPEAKERS- From IITs/NITs/IIITs and industries/organization

Principal Coordinator	Joint- Principal Coordinators	
Prof. Vijay K Gupta, IIITDM Jabalpur vkgupta@iiitdmj.ac.in M: 9425163037	Dr. Gagan Deep Meena, NIT Patna gagandeep.ee@nitp.ac.in M: 9990346430	Prof. Sanjeev Manhas, IIT Roorkee eict@iitr.ac.in M: +91 9634766397
Joint- Principal Coordinators		
Prof. Lava Bhargava, MNIT Jaipur fdp.academy@mnit.ac.in M: 954 9654 231	Prof. Tanuja Sheorey, IIITDM Jabalpur academyiiitdmj@gmail.com M: +91 9893443284	Dr. B C Sahana, NIT Patna eictapatna@nitp.ac.in L: + +91 612 - 237 1715

MODULES TOPICS-

- Module 1: Anatomy & Motion (The Body)
  - Robot Classification: Understanding the "Big 4"—Industrial manipulators, Mobile robots (AMRs), Humanoids, and Drones.
  - Degrees of Freedom (DoF): Analyzing joint types (revolute vs. prismatic) and the workspace envelope.
  - Actuators & End-Effectors: Selecting motors (DC, Stepper, Servo) and specialized grippers for diverse tasks.
- Module 2: Sensing & Perception (The Senses)
  - Sensor Integration: Implementing ultrasonic, IR, and IMU (Inertial Measurement Unit) sensors for environmental awareness
  - Computer Vision Basics: Introduction to object detection and spatial mapping using depth cameras and LiDAR.
  - Feedback Loops: Understanding how encoders and sensors allow for precision through "closed-loop" control.
- Module 3: Intelligence & Control (The Brain)
  - Programming Paradigms: Comparative look at Python-based control and block-based logic for rapid prototyping.
  - The Robot Operating System (ROS 2): Navigating the industry-standard middleware for robot communication.
  - Generative AI in Robotics: Using Natural Language to instruct robots and automate complex path planning
- Module 4: Collaboration & Deployment
  - Cobot Safety: Learning "Power and Force Limiting" (PFL) to allow humans and robots to share a workspace safely.
  - Digital Twins: Using simulation environments (like NVIDIA Isaac or Gazebo) to test robot behavior before physical deployment.
  - Ethics & Future Trends: Discussing the social impact of automation and the rise of "Robotics as a Service" (RaaS).

5. VLSI-01 – Fundamentals of MOS Device Physics 09-20 Feb 2026

EXPERTS/SPEAKERS- From IITs/NITs/IIITs and industries/organization

Principal Coordinator	Joint- Principal Coordinators	
Prof. Sanjeev Manhas, IIT Roorkee eict@iitr.ac.in M: 9634766397	NIT Warangal eict.nitw@gmail.com M: +91 912 101 6547	Dr. Deepak Bharti, MNIT Jaipur fdp.academy@mnit.ac.in M: 95302 03200
Joint- Principal Coordinators		
Dr. Vishvendra Singh Poonia, IIT Roorkee eict@iitr.ac.in M: +91 9634766397		

MODULES TOPICS-

- Module 1: Semiconductor Material Fundamentals
  - Energy Band Theory: Intrinsic vs. Extrinsic semiconductors, Fermi-Dirac distribution, and the concept of "Work Function."
  - Carrier Dynamics: Drift and diffusion mechanisms; mobility (μ) and the impact of temperature and doping concentration.
  - Poisson's Equation: Governing the electrostatic potential and charge distribution within a semiconductor.
- Module 2: The MOS Capacitor (The Core Structure)
  - Operating Modes: Visualizing and calculating Accumulation, Depletion, and Inversion (Weak vs. Strong).
  - The Threshold Voltage (V_{th}): Physical derivation of V_{th} and the impact of fixed oxide charges and interface states.
  - Capacitance-Voltage ($C-V$) Analysis: Understanding Low-Frequency (LF) vs. High-Frequency (HF) curves to diagnose oxide quality and substrate doping.
- Module 3: MOSFET Theory & Operation
  - Gradual Channel Approximation (GCA): Deriving the Square-Law model for Linear and Saturation regions.
  - Body Effect: How substrate biasing shifts the threshold voltage (V_{th}).
  - Subthreshold Conduction: Physics of leakage current when $V_{GS} < V_{th}$ and its critical importance in low-power 2026 electronics.
- Module 4: Advanced Non-Ideal & Short-Channel Effects (SCE)
  - Velocity Saturation: Why modern short-channel transistors don't follow the classic Square-Law.
  - Drain-Induced Barrier Lowering (DIBL): How the drain voltage "robs" gate control in scaled-down nodes.
  - Hot Carrier Effects: Impact of high electric fields on device reliability and aging.
  - Quantum Mechanical Effects: Introduction to tunneling (Gate Leakage) and inversion layer quantization in sub-5nm FinFETs.

6. AIML-01-AI and Machine Learning: Foundations to Frontier Applications 23 Feb-09 Mar 2026

EXPERTS/SPEAKERS- From IITs/NITs/IIITs and industries/organizations

Principal Coordinator	Joint- Principal Coordinators	
Dr. B V Phani, IIT Kanpur bvphani@eicta.iitk.ac.in L: +91 512 679 6935	Prof. Ashish Tripathi, MNIT Jaipur fdp.academy@mnit.ac.in M: 9998 65120	Prof. Sanjeev Manhas, IIT Roorkee eict@iitr.ac.in M: 9634766397
Joint- Principal Coordinators		
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MODULES TOPICS-

- Module 1: Mathematical Foundations & Data Engineering
  - The Math of Intelligence: Linear Algebra (tensors/matrices), Calculus (gradients/backpropagation), and Probability (Bayesian inference).
  - Advanced Feature Engineering: Automated data cleaning, handling high-dimensional data, and embedding generation.
  - Vector Databases: Implementing Pinecone or Milvus for semantic search and Retrieval-Augmented Generation (RAG).
- .Module 2: Core Machine Learning & Deep Learning
  - Supervised & Unsupervised Learning: Beyond Basics—Ensemble methods (XGBoost, LightGBM) and sophisticated clustering for anomaly detection.
  - Neural Architecture: Building and tuning Feedforward, Convolutional (CNN), and Recurrent (RNN) networks.
  - The Transformer Revolution: Deep dive into Self-Attention mechanisms and the architecture that powers GPT and Gemini.
- Module 3: The Frontier—Generative & Agentic AI
  - Large Language Models (LLMs): Fine-tuning strategies (LoRA/QLoRA) and prompt engineering for complex reasoning.
  - Agentic Workflows: Designing AI Agents that can use tools (browsers, APIs, code interpreters) to complete multi-step autonomous tasks.
  - Multimodal Applications: Training and deploying models that process text, image, audio, and video simultaneously.
- Module 4: MLOps, Security, and Ethics
  - MLOps Lifecycle: Versioning models with MLflow, containerization (Docker/Kubernetes), and continuous monitoring for "data drift."
  - Adversarial AI & Security: Protecting against prompt injection, model inversion attacks, and data poisoning.
  - Responsible AI: Frameworks for bias detection, explainability (SHAP/LIME), and complying with the 2026 Global AI Act standards

7. QT08- Quantum Materials

09 – 04 Apr 2026
3-5 PM daily

EXPERTS/SPEAKERS- from IITs/NITs/IIITs and industries/organizations

Principal Coordinator	Joint- Principal Coordinators	
Dr. Manoj Kumar, MNIT Jaipur fdp.academy@mnit.ac.in L: 0141 2713496	Dr. Girdhar Gopal, NIT Patna girdhar.ec@nitp.ac.in M: 7404649752	Dr. Bhagwati Sharma, MNIT Jaipur fdp.academy@mnit.ac.in M: 954 965 0012
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MODULES TOPICS-

- Band theory basics
  - Metals, Semiconductors and Insulators
  - Band structure of solids
  - Survey of semiconducting devices for quantum technologies (electronic, quantum optical devices and principle of operation)
- Correlated systems
- Magnetism
  - Para, ferro magnetism basics
  - Magnetic measurements, hall effect, magnetoresistance
  - Faraday and Kerr effects
- Superconductivity
  - BCS theory
  - Ginzburg Landau
  - Josephson Effect – AC and DC Josephson effects
  - Survey of superconducting devices for quantum technologies
- 2D materials
  - Graphene and its properties – single and few layers
  - Transition Metal Dichalcogenides – Electronic and Optical Properties
- Topological Phases of matter
  - Basics of Topology
  - Geometric phases - Berry Phase
  - Aharonov Bohm effect
  - Topological phases of matter
- Survey of material growth techniques
  - Molecular beam epitaxy
  - Chemical vapor deposition, MOVPE
  - Pulsed laser deposition, etc.
- Crystal growth techniques

8. AIML04: Special topics in AI: Generative AI for Computer Vision 09-19 Mar 2026

EXPERTS/SPEAKERS- from IITs/NITs/IIITs and industries/organizations

Principal Coordinator	Joint- Principal Coordinators	
Prof. Pritee Khanna, IIITDM Jabalpur academyiiitdmj@gmail.com , M: +91 9893443284	Dr. B V Phani, IIT Kanpur bvphani@eicta.iitk.ac.in L: +91 512 679 6935	Prof. Aparajita Ojha, IIITDM Jabalpur aojha@iiitdmj.ac.in M: 94258 00334
Joint- Principal Coordinators		
Dr. S. J. Nanda, MNIT Jaipur fdp.academy@mnit.ac.in M: 954 9654 237		

MODULES TOPICS-

- Module 1: The New Foundations—Diffusion & Beyond
  - Denoising Diffusion Probabilistic Models (DDPM): Understanding the forward (noise-adding) and reverse (denoising) processes.
  - Latent Diffusion & Stable Diffusion: Exploring the efficiency of generating in compressed latent space rather than pixel space.
  - Score-Based Generative Modeling: The mathematical framework of gradients and data distributions.
  - Adversarial Training (GANs) in 2026: How GANs are still used for real-time synthesis and high-frequency detail refinement.
- Module 2: Controllable Generation & Editing
  - ControlNet & T2I-Adapters: Adding spatial constraints (edges, depth maps, human poses) to guide image generation.
  - In-painting & Out-painting: Techniques for seamless image completion and background expansion.
  - Personalized Generation: Fine-tuning models with LoRA or DreamBooth for specific characters, styles, or products.
  - Segment-Everything-to-Generate: Using masks (SAM 2) to selectively edit or replace objects within high-resolution images.
- Module 3: Video Synthesis & Temporal Consistency
  - Text-to-Video (T2V) Architectures: Expanding 2D diffusion into 3D (space + time) using temporal attention layers.
  - Video-to-Video (V2V) Translation: Style transfer for video and realistic motion retargeting.
  - Fluid Motion & Consistency: Addressing the "flicker" problem through latent flow and consistent noise scheduling.
  - Generative World Models: How video generation is being used to train autonomous vehicles and robots in simulated "hallucinated" environments.
- Module 4: 3D Generation & Multimodal Vision
  - 3D Reconstruction from Text/Images: Using Neural Radiance Fields (NeRFs) and 3D Gaussian Splatting for generative 3D assets.
  - Vision-Language-Action (VLA) Models: Teaching models to "see" a scene and generate the visual plan for a robotic arm to execute.
  - Ethical Vision & Forensic AI: Detecting deepfakes, implementing invisible watermarking (C2PA standards), and mitigating bias in generative datasets.

9. BLC-03-Blockchain Technologies and the Future of Decentralized Systems
17 Feb – 31 Mar 2026

EXPERTS/SPEAKERS- from IITs/NITs/IIITs and industries/organizations

Principal Coordinator	Joint- Principal Coordinators	
Dr. B V Phani, IIT Kanpur bvphani@eicta.iitk.ac.in L: +91 512 679 6935	Dr. Meenakshi Tripathi, MNIT Jaipur fdp.academy@mnit.ac.in M: 954 9654 393	Prof. Sanjeev Manhas, IIT Roorkee eict@iitr.ac.in M: 9634766397
Joint- Principal Coordinators		

MODULES TOPICS-

- Module 1: Modular Architecture & Layer 2 Scaling
  - The End of the Monolith: Moving away from "one-chain-does-all" to modular stacks (e.g., Celestia for data, Ethereum for settlement).
  - Rollup Ecosystems: Deep dive into Optimistic and ZK-Rollups; understanding sequencers and proof verification.
  - App-Chains & Subnets: Designing custom, application-specific blockchains using frameworks like Avalanche Subnets or Cosmos SDK.
- Module 2: Zero-Knowledge (ZK) & Privacy Engineering
  - The Privacy Layer: Implementing zk-SNARKs and zk-STARKs for confidential transactions and identity.
  - Programmable Privacy: Building "Private-by-Design" applications where users prove eligibility (e.g., age, solvency) without revealing raw data.
  - ZkEVMs: How Zero-Knowledge proofs are enabling Ethereum to scale while maintaining total compatibility with existing code.
- Module 3: Tokenomics & Real-World Assets (RWA)
  - Institutional DeFi: Bringing trillions on-chain through the tokenization of Real Estate, Treasury Bills, and Private Equity.
  - Oracle Networks: Integrating real-world data feeds via Chainlink and decentralized sensors (DePIN).
  - Advanced Token Design: Designing sustainable economic models (ve-tokenomics) that align long-term incentives for users and protocols.
- Module 4: Decentralized Governance & Future Systems
  - DAO 2.0: Moving beyond simple "one-token-one-vote" to reputation-based and quadratic voting models.
  - Decentralized Identity (DID): Implementing Soulbound Tokens (SBTs) and W3C-standard Verifiable Credentials for a portable digital life.
  - Interoperability Protocols: Using CCIP and IBC to move assets and data seamlessly across fragmented blockchain networks

10. QT09- Engineering Foundations of Quantum Technologies 06 Apr- 01 May 2026

3 -5 PM Daily

EXPERTS/SPEAKERS- IOBM Experts

Principal Coordinator	Joint- Principal Coordinators	
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Joint- Principal Coordinators		
Prof Vineet Sahula, MNIT Jaipur fdp.academy@mnit.ac.in M: 954 9654 227		

MODULES TOPICS-

- Electrical Networks (4 hours)
  - Analog RLC circuits – resonances, impedances, quality factors
  - Transmission line basics (2 hours)
- Telegrapher equations, wave impedance, impedance matching, transmission line resonators
- Computer Science (15 hours)
  - Basics of computer architecture (1 hour)
  - Arithmetic Logic Unit
  - Memory
  - Abstract models of computation (12 hours)
  - Finite State Machine
  - Turing Machines
  - Overview of Hierarchy of languages – Regular, Context-Free, Turing Decidable and Turing Recognisable
  - Complexity Theory (2 hours)
  - Time and Space complexity
  - P vs NP, NP-completeness
- Electrical Communications (1 hour)
  - Analog Communications (1 hour)
  - Quadrature amplitude modulation
  - Heterodyne and Homodyne demodulation
- Noise and Signals (6 hours)
  - Characterising Noise
  - Types of Noise
  - Shot Noise
  - Johnson-Nyquist Noise
  - Telegraphic noise or flicker or 1/f noise
  - Signal conditioning and noise mitigation
  - Amplification and Added Noise
  - Linear Amplifier theory
  - Signal-Noise Ratio, Added Noise, Noise Figure of amplification
  - Dynamic Range
  - Noise temperature
  - Quantum limits on noise in linear amplifiers
- Digital Communications (4 hours)
  - Information entropy
  - Noiseless channel encoding
  - Noisy channel encoding
- Basics of cryptography (6 hours)
  - Basics of Number Theory
  - Random Number Generation
  - One time pad, Private key, public key, symmetric and asymmetric cryptography protocols
  - RSA and DH
- Post Quantum Cryptography (PQC)

11. UHV-01-UHV: Foundation course in human values & Professional Ethics 13 -24 Apr 2026

EXPERTS/SPEAKERS- Experts/speakers from IITs/NITs/IIITs and reputed industries/organizations

Principal Coordinator	Joint- Principal Coordinators	
Prof Vineet Sahula, MNIT Jaipur fdp.academy@mnit.ac.in M: 954 9654 227	Prof. Aparajita Ojha, IIITDM Jabalpur aojha@iiitdmj.ac.in M: 94258 00334	Prof. Sanjeev Manhas, IIT Roorkee eict@iitr.ac.in M: 9634766397
Joint- Principal Coordinators		
Dr. Ravi K. Maddila, MNIT Jaipur fdp.academy@mnit.ac.in M: 954 9654 238		

MODULES TOPICS-

- Module 1: Introduction to Value Education
  - The Need for Value Education: Understanding the gap between technical "skills" and human "values."
  - Process of Self-Exploration: Using "Natural Acceptance" and "Experiential Validation" as mechanisms for self-discovery.
  - Basic Human Aspirations: Defining Continuous Happiness and Prosperity vs. the mere accumulation of physical facilities.
  - The Harmony of Self: Distinguishing between the needs of the Self ('I') (Happiness/Respect) and the Body (Physical Facilities).
  - Ethics in the Workplace: Operationalizing Integrity, Accountability, and Transparency.
- Module 2: Harmony in Human Relationships
  - Foundational Values: Deep dive into Trust (Vishwas) and Respect (Samman).
  - Intention vs. Competence: Resolving conflicts by separating a person's underlying intent from their current ability.
  - Harmony in Society: Visualizing the transition from family units to a "Universal Human Order" (Akhand Samaj).
  - Justice & Fearlessness: Understanding justice as the fulfillment of values in relationships leading to mutual happiness.
- Module 3: Professional Excellence & Integrity
  - The Concept of Profession: Defining a profession as a service to humanity rather than just a source of livelihood.
  - Ethical Dilemmas: Frameworks for navigating "Grey Areas" where business interests conflict with moral ideals.
  - Case Studies: Analysis of real-world professional failures (e.g., historical engineering disasters or corporate fraud) vs. ethical leadership models.
- Module 4: Frontier Ethics: Technology & Environment
  - Ecological Ethics: Understanding the "Four Orders of Nature" and our responsibility for self-regulation and recyclability.
  - Digital & AI Ethics: The 2026 imperative—maintaining human agency, privacy, and fairness in an automated world.
  - Global Issues: Social responsibility of MNCs, environmental equity, and the ethics of wealth distribution.

12. CBS-07-Cybersecurity Intelligence and Ethical Hacking Practices 20 Apr – 01 May 2026

EXPERTS/SPEAKERS-

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Joint- Principal Coordinators		
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MODULES TOPICS-

- Phase 1: Foundations & Environment Setup
- Before "hacking," one must understand how the systems being defended (or attacked) actually work.

Networking Essentials: OSI & TCP/IP models, IP addressing (IPv4/IPv6), DNS, DHCP, and common ports/protocols.

Operating Systems: Linux command-line mastery (Kali/Parrot OS), Windows internals, and basic Bash/Python scripting for automation.

The Hacking Lab: Setting up a safe, isolated environment using virtualization (VMware/VirtualBox) to host "attacker" and "victim" machines.

Cybersecurity Fundamentals: The CIA Triad (Confidentiality, Integrity, Availability), threat vs. risk, and governance frameworks (NIST, ISO 27001).

- Phase 2: Information Gathering & Intelligence
- This phase focuses on the "Intelligence" aspect—collecting data to identify high-value targets.

Footprinting & Reconnaissance: Passive vs. active recon, Google Dorking, and WHOIS lookups.

OSINT (Open Source Intelligence): Using tools like Maltego, Shodan, and Recon-ng to find leaked data or exposed services.

- Scanning Networks: Advanced Nmap techniques, host discovery, and OS fingerprinting.
- Vulnerability Assessment: Using scanners (Nessus, OpenVAS) to identify unpatched software and scoring them via CVSS.
- Phase 3: Ethical Hacking Practices (Offensive)
- The core of the program focuses on the technical methods used to exploit vulnerabilities.
- System Hacking: Password cracking (brute-force, dictionary attacks), privilege escalation (Linux/Windows), and clearing tracks to maintain stealth.
- Web Application Hacking: Mastering the OWASP Top 10 (SQL Injection, XSS, Broken Access Control, SSRF) using tools like Burp Suite.
- Malware Analysis: Understanding Trojans, Ransomware, and RATs; static and dynamic analysis of malicious files.
- Social Engineering: Phishing simulations, identity spoofing, and the psychology of manipulation.
- Wireless & IoT Security: Cracking WPA2/WPA3, rogue access points, and vulnerabilities in smart devices.

- Phase 4: Cybersecurity Intelligence & Defense
- Modern programs include a "Blue Team" component to ensure students can defend what they break.
- Threat Intelligence: IOCs (Indicators of Compromise) vs. IOAs (Indicators of Attack), mapping adversary behavior with the MITRE ATT&CK framework.
- SOC Operations: Monitoring traffic using SIEM tools (Splunk, ELK Stack, Azure Sentinel) and incident triage.
- AI in Cybersecurity: Detecting AI-generated phishing, adversarial attacks on ML models, and using AI for automated threat hunting.
- Cloud Security: Securing AWS/Azure/GCP environments, S3 bucket misconfigurations, and IAM privilege escalation.
- Phase 5: Capstone & Reporting
- Incident Response: The lifecycle of a breach—from detection and containment to recovery.
- Professional Reporting: Learning how to write technical reports for developers and executive summaries for management.
- Capture The Flag (CTF): A final practical competition (on platforms like Hack The Box or TryHackMe) to prove hands-on proficiency.

13. QT10- Solid State Physics for Quantum Technologies

04 -29 May 2026
3 -5 PM daily

EXPERTS/SPEAKERS- Experts/speakers from IBM

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Joint- Principal Coordinators		
Dr. K. Venkataratnam MNIT Jaipur fdp.academy@mnit.ac.in M: 954 9654 377		

MODULES TOPICS-

- Structure of solids –
  - Symmetry, Bravais lattices
  - Laue equations and Bragg's law,
  - Brillouin Zones
  - Atomic scattering and structure factors.
- Characterisation of crystal structures – XRD etc.
- Bonding in solids –
  - van der Waals and Repulsive interactions,
  - Lennard Jones potential,
  - Madelung constant
- The Drude theory of metals –
  - DC & AC electrical conductivity of a metal;
  - Hall effect & magnetoresistance,
  - Density of states, Fermi-Dirac distribution, Specific heat of degenerate electron gases
  - Free electron model
- Beyond the Free electron model
  - Kronig-Penney Model
  - Periodic potential – Bloch Theorem
  - Band theory
  - Tight binding model
- Phonons in Solids
  - One dimensional monoatomic and diatomic chains
  - Normal modes and Phonons
  - Phonon spectrum
  - Long wavelength acoustic phonons and elastic constants
  - Vibrational Properties- normal modes, acoustic and optical phonons
- Magnetism
  - Dia-, Para-, and Ferromagnetism
  - Langevin's theory of paramagnetism
  - Weiss Molecular theory
- Superconductivity:
  - Phenomenological description – Zero resistance, Meissner effect
  - London Theory
  - BCS theory
  - Ginzburg-Landau Theory
  - Type-I and type-II superconductors
  - Flux quantization
  - Josephson effect.
- High Tc superconductivity

14. VLSI-04B-VLSI Design & Technology 11 - 22 May 2026

EXPERTS/SPEAKERS- Experts/speakers from IBM

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Joint- Principal Coordinators		

MODULES TOPICS-

- 1. Foundation Modules

Before diving into chip design, programs ensure a strong grasp of the underlying physics and logic.

Semiconductor Physics: PN junctions, MOS capacitor physics, and MOSFET characteristics (IV/CV curves).

Digital Electronics: Combinational logic (mux, adders), sequential logic (flip-flops, FSMs), and timing analysis (setup/hold times).

Computer Architecture: RISC vs. CISC, pipeline stages, and memory hierarchy (SRAM, DRAM, Flash).

- 2. Front-End Design & Verification

This phase focuses on the "code" or logic that defines what the chip does.

.Hardware Description Languages (HDL): Extensive training in Verilog or SystemVerilog

RTL Coding: Writing synthesizable code for complex digital systems.

Functional Verification: * Testbench development.

UVM (Universal Verification Methodology): The industry standard for verifying complex designs.

Assertion-Based Verification (SVA).

- 3. Back-End (Physical Design)

This phase focuses on how the design is physically laid out on a silicon wafer.

CMOS Fabrication: Photolithography, etching, diffusion, and ion implantation.

Physical Design Flow: * Floorplanning: Defining the chip boundary and pin placement.

Placement & Routing (PnR): Mapping logic gates to physical locations and connecting them.

Static Timing Analysis (STA): Ensuring the signals reach their destination within the clock cycle

Layout & DRC/LVS: Design Rule Checks (DRC) to ensure the layout can be manufactured and Layout vs. Schematic (LVS) to ensure it matches the logic.

Specialized Tracks & Advanced Topics

Analog & Mixed-Signal Design: Designing op-amps, ADCs/DACs, and PLLs.

FPGA Prototyping: Mapping designs onto Xilinx or Altera FPGAs for hardware testing.

Low Power Design: Techniques like clock gating, power gating, and multi-voltage domains to save battery life.

Design for Testability (DFT): Adding "scan chains" and BIST (Built-In Self-Test) to the chip so it can be tested for defects after manufacturing

15. AIML-05: Agentic AI — 18 -29 May 2026

EXPERTS/SPEAKERS- Experts/speakers from IITs/NITs/IIITs and reputed industries/organizations

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Joint- Principal Coordinators		
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MODULES TOPICS-

- Module 1: The Agentic Loop (Reasoning & Planning)
  - Beyond One-Shot Generation: Understanding the "Sense → Think → Act" cycle.
  - Reasoning Frameworks: Implementing ReAct (Reasoning + Acting), Chain-of-Thought (CoT), and Tree-of-Thought patterns for complex logic.
  - Autonomous Planning: Breaking down high-level user goals into executable sub-tasks and dependency graphs.
  - Reflection & Self-Correction: Building agents that critique their own outputs and iterate until a goal is met.
- Module 2: Tool Use & Environment Interaction
  - Function Calling & API Orchestration: Teaching agents to use external tools (Search, SQL, Python Interpreters, CRM APIs).
  - Model Context Protocol (MCP): Implementing the 2026 industry standard for secure, plug-and-play tool integration.
  - Human-in-the-Loop (HITL): Designing "Interrupt" patterns for agents to seek human approval before high-stakes actions (e.g., financial transactions).
  - Dynamic Tool Discovery: How agents "find" and learn to use new tools at runtime.
- Module 3: Multi-Agent Orchestration & Collaboration
  - Specialized Agent Roles: Designing "Swarm" architectures where a Manager agent coordinates specialized Worker agents (e.g., a "Researcher" + "Writer" + "Fact-Checker").
  - Communication Protocols: Implementing A2A (Agent-to-Agent) messaging and shared state management.
  - Framework Mastery: Hands-on development with LangGraph, CrewAI, and Microsoft AutoGen
  - Conflict Resolution: Managing race conditions and conflicting outputs in distributed agent teams.
- Module 4: AgentOps & Secure Deployment
  - Observability & Tracing: Using tools like LangSmith or Arize Phoenix to debug long-running autonomous traces.
  - Evaluation (Evals): Building "Agent Benchmarks" to measure goal success rate, cost-per-task, and latency.
  - Sandboxing & Safety: Running agent-generated code in isolated environments (gVisor/Wasm) to prevent system exploits.
  - Agentic RAG: Advanced Retrieval-Augmented Generation where the agent autonomously decides what, when, and how to search for knowledge.

16. QT11- Quantum Optics

01- 26 June 2026
3 -5 PM daily

EXPERTS/SPEAKERS- Experts/speakers from IBM

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Joint- Principal Coordinators		
Prof. Kanupriya Sachdev MNIT Jaipur fdp.academy@mnit.ac.in M: 954 965 7337		

MODULES TOPICS-

- Quantization of the electromagnetic field
- Number states, coherent states, squeezed states
- Hanbury-Brown and Twiss experiments – Photon bunching, Photon anti bunching
- Hong-Ou-Mandel interference
- Theory of Optical coherence
- Young's double slit experiment and first order coherence
- Coherence functions of arbitrary order
- Normal ordering, symmetric ordering and ani-normal ordering of operators
- Interferometry
- Phase-space representations of states of light
- Wigner distribution
- P-function and the notion of non-classicality with some examples of nonclassical states like squeezed states and their applications
- Husimi Q function
- Light-matter interaction
- Classical model of light-matter interaction
- Semi-classical model of light-matter interaction-
- Quantum light-matter interaction
- Rabi Model
- Jayne's-cummings model
- Open quantum systems
- Fermi golden rule
- Born-Markov Lindblad Master Equation

17. IKS-01-Indian Knowledge System (IKS) 01- 12 June 2026

EXPERTS/SPEAKERS- Experts/speakers from IBM

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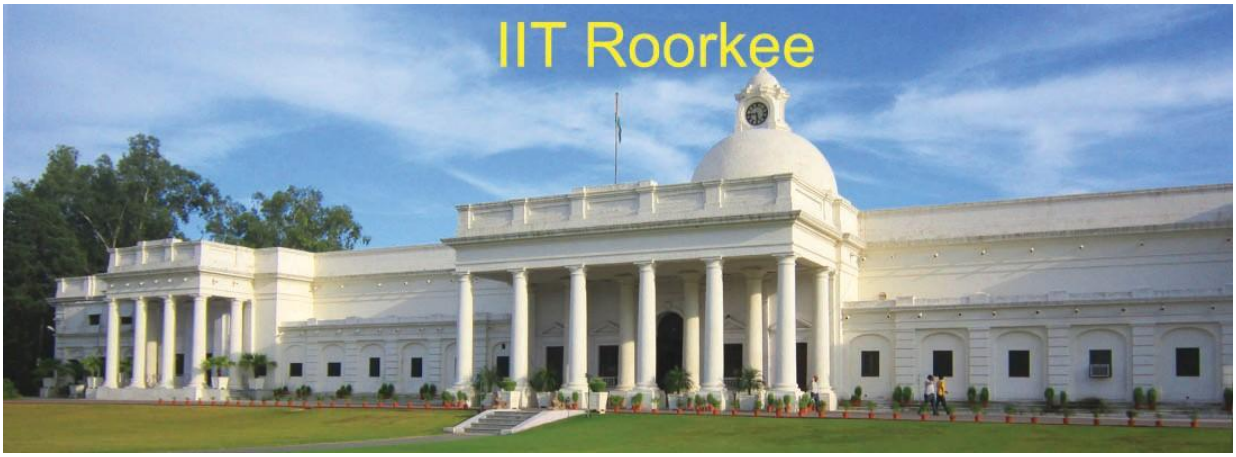
Joint- Principal Coordinators		

MODULES TOPICS-

- Module 1: Foundations of IKS
  - Focus: Establishing the scope, history, and philosophical pillars of Indian wisdom.
  - Genesis of IKS: Definition, need, and relevance of IKS in the 21st century.
  - The Vedic Corpus: Overview of the four Vedas, Vedāngas (limbs of Vedas), and Upavedas (applied sciences like Ayurveda, Dhanurveda).
  - Indian Philosophical Systems: * Astika (Orthodox): Sāṃkhya, Yoga, Nyaya, Vaiśeṣika, Mīmāṃsā, and Vedānta.
  - Nastika (Heterodox): Carvaka, Jainism, and Buddhism.
  - Wisdom through Literature: Insights from the Purāṇas, Itihāsa (Ramayana, Mahabharata), and Niti Śāstras.
  - Epistemology: The Knowledge Triangle—Prameya (object of knowledge), Pramāṇa (valid means of knowledge), and Saṃśaya (doubt).
- Module 2: Language, Logic, and Mathematics
  - Focus: The structural and computational aspects of Indian intellect.
  - Linguistics & Phonetics: Panini's Aṣṭādhyāyī; the role of Sanskrit in modern Natural Language Processing (NLP).
  - Indian Number Systems: Concept of Zero (Shunya), decimal place value, large numbers, and the binary system (Pingala's Chandaḥ-śāstra).
  - Mathematics: Contributions of Aryabhata, Brahmagupta, and Bhaskaracharya in Algebra, Geometry, and Trigonometry.
  - Astronomy (Jyotiṣa): The Indian Calendar (Pañcāṅga), celestial coordinate systems, and ancient astronomical instruments (Yantras).
- Module 3: Science, Technology, and Architecture
  - Focus: Physical reality and material heritage.
  - Metallurgy: Ancient Indian expertise in Copper, Gold, Iron, and the famous Damascus Steel (Wootz).
  - Vastu Śāstra & Town Planning: Civil engineering and architectural principles of the Indus Valley and Temple Architecture.
  - Agriculture (Krishi Vijnana): Ancient farming techniques, water management, and soil conservation.
  - Other Sciences: Ship-building, Dyes and Painting technology, and the 64 Kalās (Arts/Skills)
- Module 4: Health, Wellness, and Psychology
  - Focus: Holistic well-being and the internal human system.
  - Ayurveda: Fundamentals of Tridoṣa (Vata, Pitta, Kapha), nutrition (Ahara), and lifestyle (Vihara).
  - Yoga: The Aṣṭāṅga Yoga system of Patanjali and its application in modern mental health.
  - Indian Psychology: Concepts of consciousness, the Triguṇa system (Sattva, Rajas, Tamas), and the Panchakosha (five sheaths of human personality).
- Module 5: Governance and Social Systems
  - Focus: Ethics, administration, and society.
  - Statecraft: Governance models from Kautilya's Arthaśāstra and the Shanti Parva of Mahabharata.
  - Ethics & Values: The concept of Dharma, Ṛta (cosmic order), and Purusharthas (aims of life).
  - Social Structure: Evolution of the Varna and Ashrama systems and the role of the family unit.
  - IKS Way Forward: Methods for integrating traditional knowledge into modern academic disciplines.

Various courses from IIT Kanpur in both Self-Paced and Online Live mode are being offered in this the period from January till June 2026. The courses are available to faculty under the Faculty Development Programmes for a Nominal Registration fee.

Links to Self paced/online-live programmes by EICT Academy by IIT Kanpur		
Cyber Security	Self-Paced	https://eicta.iitk.ac.in/cyber-security-fdp/
Compiler Design, Analysis & Optimization	Self-Paced	https://eicta.iitk.ac.in/compiler-design-analysis-optimization-fdp/
Linux	Self-Paced	https://eicta.iitk.ac.in/linux-fdp/
Full Stack Development with PhP & MySQL	Self-Paced	https://eicta.iitk.ac.in/full-stack-development-with-php-mysql-fdp/
Basic Programming using Python	Self-Paced	https://eicta.iitk.ac.in/basic-programming-using-python-fdp/
Deep Learning with Generative AI for Computer Vision	Self-Paced	https://eicta.iitk.ac.in/deep-learning-with-generative-ai-for-computer-vision-fdp/
IOT with Drone	Online Live	https://eicta.iitk.ac.in/product/iot-with-drone/
Data Analytics using AI	Online Live	https://eicta.iitk.ac.in/product/data-analytics-using-ai/
Generative AI Course	Online Live	https://eicta.iitk.ac.in/product/generative-ai-course/
Data Structures and Algorithms (with Java)	Online Live	https://eicta.iitk.ac.in/product/data-structures-and-algorithms-with-java/
Data Science (ML & AI)	Online Live	https://eicta.iitk.ac.in/product/data-science-mlai/
Introduction to IOT	Online Live	https://eicta.iitk.ac.in/product/internet-of-things/
Cyber Security (On Premises Hacking)	Online Live	https://eicta.iitk.ac.in/product/cyber-security-on-premises-hacking/
Machine Learning with Python	Online Live	https://eicta.iitk.ac.in/product/machine-learning-with-python/
Fundamentals of Python Programming	Online Live	https://eicta.iitk.ac.in/product/fundamentals-of-python-programming/
Advance Excel with Tableau	Online Live	https://eicta.iitk.ac.in/product/advance-excel-with-tableau/
Advance Excel with Power BI	Online Live	https://eicta.iitk.ac.in/product/advance-excel-with-power-bi/
Advance Excel with Data Visualization	Online Live	https://eicta.iitk.ac.in/product/advanced-excel-with-data-visualization/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IIT Guwahati


NIT
WARANGAL


MNIT Jaipur
MNIT


NIT Patna

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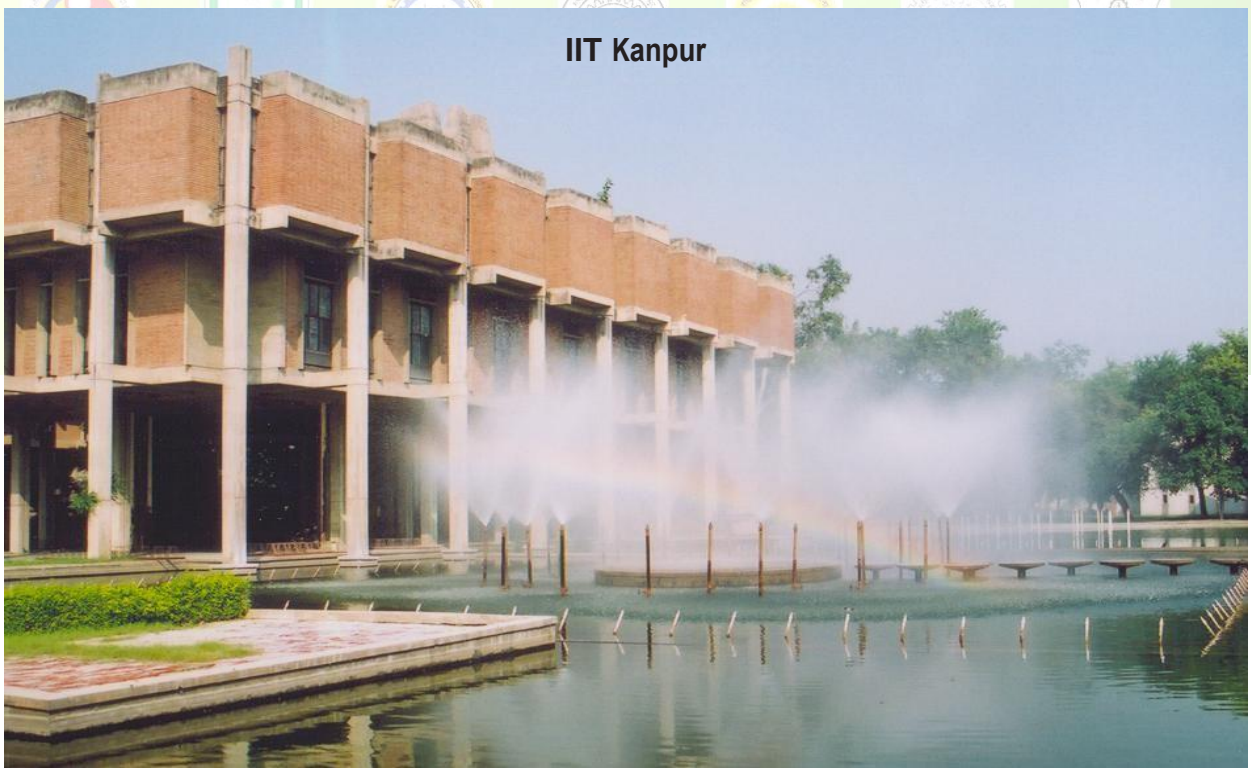

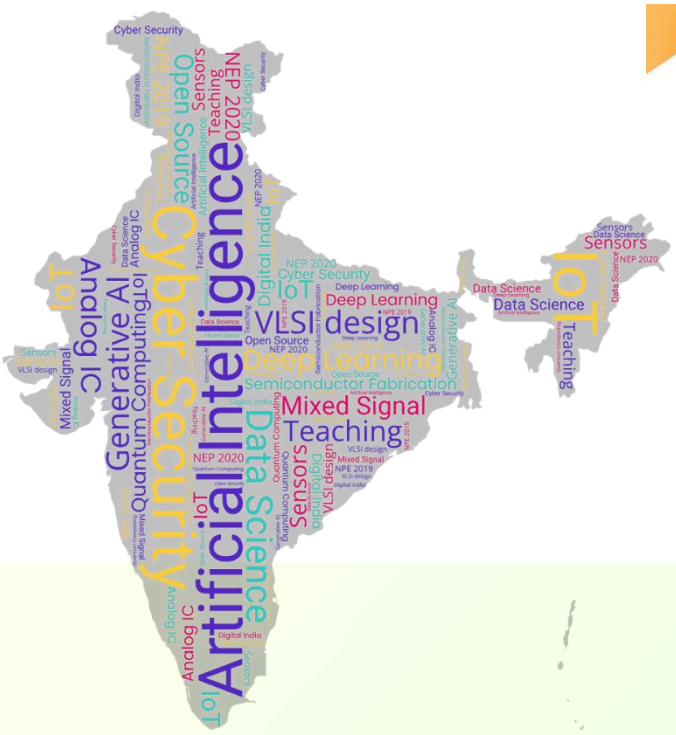

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