CHIEF PATRON

Professor Shakil Ahmad Romshoo, Honorable Vice-Chancellor, IUST

PATRON

Professor Ayaz Hassan Moon, Dean of Academic Affairs, IUST

Course Coordinator from Islamic University of Science and Technology

Dr. Liyaqat Nazir, Assistant Professor, ECE (Expertise: VLSI Design, Reconfigurable Hardware & VLSI DSP)

Email : kast@iust.ac.in Ph No: 9682544371

Course Co-Coordinator from Islamic University of Science and Technology

Dr. Syed Zubair Ahmad Shah, Assistant Professor, CSE, co-coordinator KAST (Expertise: Data mining & Machine Learning)

Dr. Yasir Altaf, Assistant Professor, IUST. co-coordinator KAST (Expertise: Early warning system)

Organising Members

Dr. Faroze Ahmad, Associate Professor, Head Department of ECE (Expertise: Solar PV)

Dr. Khalid Muzzafar, Associate Professor, ECE (Expertise: Microwave and Antenna Design)

Dr. Romana Yousuf, Assistant Professor, ECE (Expertise: Solar Device physics & VLSI)

Dr. Asifa Mehraj Baba, Assistant Professor, ECE (Expertise: Artificial Intelligence & ML)

Dr. Shaiqa Nasreen, Sr. Assistant Professor, ECE (Expertise: Computer Network Security)

Dr. Zahid Gulzar Khaki, Assistant Professor, ECE (Expertise: Optical Fibre Communication)

Dr. Shakeel Ahmad Malik, Assistant Professor, ECE (Expertise: Signal processing, SNN)

Principal Investigator & Course Coordinator E&ICT Academy, IIT Guwahati

Prof. Gaurav Trivedi

Professor, Dept. of Electronics and Electrical Engineering IIT Guwahati

About E&ICT Academy

Electronics and ICT Academy is an initiative of the Ministry of Electronics and Information Technology (MeitY), Govt. of India for conducting various Faculty / Research Scholar Development Programme. Academy has planned short term training programmes on fundamental and advanced topics in IT, Electronics & Communication, Product Design, Manufacturing with hands-on training and project work using the latest software tools and systems. In addition, the Academy will conduct specialized / customized training programmes and research promotion workshops for corporate sector & educational institutions.

Who Can Attend?

The Programme is open to Faculty Members and PhD Research Scholars from universities and colleges. Faculty members are requested to submit an NOC from their respective institute before attending the session.

For details of the Programme and course contents please log in to Electronics and ICT Academy website:

Scan to Register

+91-361-2583182 (O)
+91-7086502139 (M)

eictacad@iitg.ac.in
eictacad@gmail.com

One Week Faculty Development Programme on

"Recent Trends in VLSI Chip Designing using open source tools"

10th to 14th November 2025

Organized by

E&ICT Academy, IIT Guwahati
in association with

Kalam Academy of Skill Development and Training

Islamic University of Science and Technology Kashmir (J&K)

Digital India
Power To Empower

ELECTRONICS INDIA

About Islamic University of Science and Technology Kashmir (J&K) :

Nestled in the scenic landscape of Awantipora, the Islamic University of Science and Technology (IUST) Kashmir has established itself as a premier, forward-looking institution with a clear aim to be a leader in engineering and technological innovation. With a strong focus on disciplines like Civil, Electrical, Mechanical, and Electronics & Communication Engineering, the university is dedicated to creating a vibrant ecosystem for applied research and development. By integrating advanced technical education with a spirit of inquiry, IUST's core mission is to produce highly skilled engineers and technologists who are equipped to drive progress and provide sustainable solutions for the region and beyond.

About Kalam Academy of Skill Development and Training (KAST): KAST is the skilling and training Department of IUST. KAST offers programs and training modules to provide a comprehensive and hands-on learning experience.

Mode of Delivery:

Online at WebEx Platform

Course Objectives :

❖ To introduce participants to the fundamentals of RTL design, synthesis, and VLSI design flow.

❖ To familiarize learners with open-source EDA tools such as OpenROAD for digital IC design.

❖ To provide hands-on experience in floorplanning, placement, clock tree synthesis, and routing.

❖ To develop understanding of verification techniques including Static Timing Analysis, DRC, and LVS.

❖ To expose participants to analog layout design methodologies and open-source IC design frameworks.

❖ Course Outcomes :

❖ Understand the complete VLSI design flow from RTL to GDSII using open-source tools.

❖ Install, configure, and execute OpenROAD and other supporting EDA tools effectively.

❖ Perform synthesis, placement, routing, and timing analysis on different technology nodes.

❖ Analyze design performance through design checks, DRC, LVS, and STA reports.

❖ Apply the acquired knowledge to implement both digital and analog IC design flows using open-source platforms.

❖ Prerequisites :

❖ Basic understanding of Digital Electronics and Logic Design.

❖ Familiarity with C/C++ or Verilog/VHDL programming languages.

❖ Knowledge of computer architecture and semiconductor fundamentals.

❖ Exposure to Linux operating system and basic UNIX commands.

❖ Interest in IC design, physical design automation, or EDA tools.

Please Note:

❖ Registration fees includes participation certificate and grade certificate.

❖ Participants have to submit UTR No. as the proof of payment while registering for the Faculty Development Programme.

❖ Registration Fees is refundable if the registration cancellation request is submitted before the last date of registration.

For Online Transfer

Bank Name: State Bank of India
Account Name: IIT Guwahati R and D
E and ICT Academy
Account No.: 36071160089
IFSC Code: SBIN0014262

SCAN & PAY

Per Day Timing:
10:00 am to 05:00 pm

Course Date:
10th to 14th November, 2025

Contact Hours for the Course:
40Hrs (Theory, Activities, Case Studies & Evaluation)

Registration Fees: Rs. 500/- (Inclusive of GST)
Mode of payment: Online only (NEFT/RTGS/IMPS)

Last Date of Registration: 05/11/2025

Registration Link :
https://forms.gle/qpc7XY78NNiW4GHC7