

## Joint Online Two Weeks Faculty Development Programme

**Open POWER ISA RISC based Architecture Design(Enabled by Industry IBM)  
October 18 – October 29, 2021**

organized by

**IIT Guwahati, IIT Roorkee, MNIT Jaipur, NIT Patna and PDPM IITDM Jabalpur**



### Course Contents

Genre	Topic	Genre	Topic
Overview	Unveiling POWER Architecture Course - Introduction	Testing	System Verilog Essentials
Prerequisite	Microwatt Introduction		Flow of the stimulus in IP verification environment
Design & Testing	Microwatt Simulation - With Samples to explore functionality	Testing	Different testbench automation techniques in IP verification
Design	FPGA Implementation of Microwatt system	Testing	Describing testing with one example
Design	System on Chip (SoC) and its Components & Introduction to IP Cores	Testing	Components of SoC verification
Design	Libre - SoC and its components	Testing	Flow of the stimulus in SoC verification environment
Design	Libre - SoC Tool chain and Environment	Testing	Different testbench automation techniques in IP verification
Design	Impact and use of Wishbone Bus and its protocols	Testing	Describing SoC testing with one example
Design	Exploring Core to Peripheral Communication	Demo Labs	Testing Libre - SoC
Design	Exploring Memory to Memory Communication		Libre-SoC FPGA to ASIC - Exploration of Fab specific changes in the design
Design	Address Space Exploration	ASIC Design	OpenLANE Flow for GDS II Generation
Demo Labs	Porting of design on FPGA and programming it	ASIC Design	Coriolos 2 Flow for GDS II Generation
Testing	Testing concepts - Introduction		
Testing	Testing Open Source Environmental Setup		
Testing	Components of IP Core verification		

### Registration Details

Registration link -

<https://forms.gle/nYxGrwYkVVRhDBXr8>

Registration fee

Faculty/students – Rs. 500/-

Others – Rs. 1000 /-

Foreign participants – Rs. 4000/-

### Principal Coordinator

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### Online payment details:-

Bank Name: State Bank of India

A/C Name: IIT Guwahati R and D E and ICT Academy

Account No.: 36071160089

IFSC Code: SBIN0014262

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**Last Date to apply: October 11, 2021**

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