

SUMMER TRAINING ON MICROELECTRONICS TECHNOLOGY AND VLSI DESIGN



IC DESIGN & FABRICATION CENTRE

Department of Electronics & Telecommunication Engineering
Jadavpur University, Kolkata – 700032

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[1] VLSI Design using EDA Tanner Tools

- a) Introduction to EDA Tools
- b) Basic gates design using Schematic Capture(S-edit)
- c) Netlisting Using T-Spice
- d) Verification of design using waveform editor
- e) Layout design using L-edit
- f) Parasitic extraction

[2] Design Verification Using Verilog and FPGA Implementation of Digital Systems.

- a) Introduction to Digital Systems Modeling using Verilog
- b) Verification of Digital Systems Design using Modelsim
- c) Synthesis of Digital system using Xilinx VIVADO Tool
- d) Realization of digital systems on a Xilinx Artix-7 board
- e) Notion of RTL and Technology Schematic and Power Simulation

[3] Fabrication and Characterization of semiconductor devices

- a) Mask Fabrication
- b) Theoretical Simulation
- c) Hardware fabrication for all process of Microelectronics: cleaning, etching, oxidation, diffusion, photolithography and Metallization.
- d) Characterization of fabricated device.

Duration: 6 weeks, Course starts from 1st week of June 2018 tentatively (after WBUT semester examination). Final date will be announced later on.

Time: 10.00 AM to 6.00 PM, Monday to Saturday.

Eligibility: The Candidate should be at least B.E./B.Tech 3rd year and above in Electronics and Communication / Instrumentation / Electrical / Computer Science / Information Technology.

Admission: Application form will be issued from the IC Centre, Department of Electronics & Telecommunication Engineering, Jadavpur University or download from our website [www.jaduniv.edu.in/www.juiccentre.in]. Filled in application form shall be received at IC Centre during working hours (Monday to Friday, 11 AM to 5 PM). Total seat 90, @ 30 per batch, Admission shall be first come first serve basis.

Fees: @ Rupees **8,000/-** in demand draft should be drawn in favour of "**REGISTRAR, JADAVPUR UNIVERSITY**", in any branches of "**State Bank of India**" payable at Kolkata. Once deposited the course fee cannot be refunded. Hostel accommodation cannot be provided.

Enclosure: One copy of PP Size Photograph, **Xerox copy** of Madhyamik Admit Card, HS Mark sheet, all Semesters Mark sheet & other certificates. [Attested / Self Attested copies of Mark sheets / Certificates to be enclosed]