

**WINTER TRAINING ON  
MICROELECTRONICS TECHNOLOGY AND VLSI DESIGN**



**IC DESIGN & FABRICATION CENTRE**  
Department of Electronics & Telecommunication Engineering  
Jadavpur University, Kolkata – 700032

Website: [www.jaduniv.edu.in](http://www.jaduniv.edu.in)  
E-mail: [juicentre@gmail.com](mailto:juicentre@gmail.com) Phone: (033) 2457-2406 / 2414-6217  
M: 9830157714, 9836046458.

**[1] VLSI Design using EDA Tools**

- a) Introduction to EDA Tools
- b) Basic gates design using Schematic Capture
- 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 VHDL 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 NEXYS4 DDR 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 1<sup>st</sup> week of January 2023 tentatively (after WBUT semester examination). Final date will be announced later on.

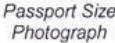

**Time:** 10.00 AM to 6.00 PM, Monday to Saturday.

**Eligibility:** The Candidate should be at least B.E./B.Tech 3<sup>rd</sup> 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, 3<sup>rd</sup> Floor, Jadavpur University, Kolkata or download from our website [[www.jaduniv.edu.in](http://www.jaduniv.edu.in)]. Filled in application form shall be received at IC Centre during working hours (Monday to Friday, 11 AM to 5 PM). Total seat 30, Admission shall be first come first serve basis.

**Fees:** @ Rupees 7,000/- Students Fees + 18% GST (Rs. 1,260/-) = Total Rs. 8,260/- in demand draft should be drawn in favour of "REGISTRAR, JADAVPUR UNIVERSITY", in any Nationalized branches of 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 / Birth Certificate, HS Mark sheet, all Semesters Mark sheet & other certificates. [Attested / Self Attested copies of Mark sheets / Certificates to be enclosed]

<b>Application for Admission</b>		<b>Form No. IC/</b>
<i>For Office use only</i>		
<b>Certificate Course in VLSI Design and Microelectronics Technology</b>		
<b>Year:</b>		
<b>Batch:</b>		
		<b>IC Centre</b> <b>Jadavpur University</b> juicentre@gmail.com

**Instruction for Applicants**

- 1] Fill up the Application for in CAPITAL letters only. Use black ink to fill up the form.
- 2] All applications should fill up the form in full. If any item is not applicable, please cross it out or Write "NA". In the space provided. Incomplete forms shall be rejected.
- 3] Applicants are advised to retain a photocopy of the filled in Application Form for future reference.

**Name:** \_\_\_\_\_

**Date of Birth:** \_\_\_\_\_ **Sex:** \_\_\_\_\_  
 [Attested copy of Certificate/Admit Card to be enclosed]

**Address for Correspondence:** \_\_\_\_\_

\_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Pin \_\_\_\_\_

Phone \_\_\_\_\_ email \_\_\_\_\_

**Permanent Address:** \_\_\_\_\_

\_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Pin \_\_\_\_\_

Phone \_\_\_\_\_ email \_\_\_\_\_

**Nationality:** \_\_\_\_\_  
**Whether Belong to SC/ST: Yes / NO**  
**Disability: Yes / No.**  
**Father's/Guardian's Name:** \_\_\_\_\_

**Education:** [Std. XII Onwards] [Attested copies of Mark sheets/Certificates to be enclosed]

Exam. Passed	Board/University	Year Passed	Specialization	% of Marks

**Software Course (if any)** [Attested copies of Mark sheets/Certificates to be enclosed]

Course	Institution	Duration	From	To	Certificate [Diploma/Degree]

**Work Experience** [if applicable]

Organization	From	To	Functional Area	Software Experience (if any)	If Yes. Duration

Demand Draft No.	Date	Name of the Bank	Amount

**Any other information relevant to this application:**

**Declaration:**

The information furnished by me is true to the best of my knowledge and belief any statement made in the application form, if found incorrect on scrutiny, will render the application liable to rejection and admission, if granted on the basis of the statement, will stand cancelled.

**Date of Application:**

**Place:**

**Website:** [www.juiccentre.in](http://www.juiccentre.in), [www.jaduniv.edu.in](http://www.jaduniv.edu.in)

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**Signature of Applicant**