

# VLSI Design

## VLSI Design using Cadence Tool

*2 Weeks Online Course*

**Duration: 2 Weeks (2 Hrs. per day)**

**Medium of Instructions: English + Hindi**

### Objective

VLSI Design course offered by NIELIT Gorakhpur will assist engineers who wish to gain theoretical as well as practical knowledge in the field of Very Large Scale Integration (VLSI) design. It will also prepare them to keep pace with the changing trends of VLSI technology and the requirements of an ever-growing VLSI design industry.

B. Tech. in Electronics / Electrical / Instrumentation (Completed or Pursuing)

### Eligibility

### Prerequisite

- ✓ Candidate must have latest computer/laptop with preferably 4 GB RAM or higher and Graphics Card (2 GB)
- ✓ Internet connection with good speed (*preferably 2 Mbps or higher*)

Rs. 2000/- incl. GST & all other charges.

### Course Fees

### Certificate

Certificate will be provided to the participants, based on minimum 75% attendance and on performance (minimum 50% marks) in the online test, conducted at the end of the course.

- ✓ Instructor-led live classes.
- ✓ Instructor-led hands-on lab sessions.
- ✓ Content Access through e-Learning portal.
- ✓ Assessment and Certification

### Methodology

### How to Apply?

- ✓ **Step-1:** Read the course structure & course requirements carefully.
- ✓ **Step-2:** Visit the Registration portal and click on apply button.
- ✓ **Step-3:** Create your login credentials and fill up all the details, see the preview and submit the form.
- ✓ **Step-4:** Login with your credentials to verify the mobile number, email ID and then upload the documents, Lock the profile and Pay the Fees online, using ATM-Debit Card / Credit Card / Internet Banking / UPI etc.

**Course Content**

Day	Topic	Day	Topic	Day	Topic
Day #01	Introduction to VLSI Design, Historical Perspective, VLSI technology trends, System approach to VLSI Design.	Day #02	VLSI Design Cycle, ASIC Design Flow, Fabrication, Packaging, Testing and Debugging.	Day #03	Basics of Analog Circuits-1, Design and Analysis of RC circuits, Timing issues in RC Circuits.
Day #04	Operation Amplifiers Fundamentals, Design and Analysis of Op-Amps-1	Day #05	Design and Analysis of Op-Amps-2	Day #06	CMOS Inverter Basics
Day #07	CMOS Inverter Basics, Sizing	Day #08	Designing Combinational Logic Gates, Logical Efforts	Day #09	Combinational Circuits, Timing Analysis
Day #10	VLSI Physical Design Automation				

**Course Coordinator**

**Sh. Deepam Dubey (Scientist-C)**  
NIELIT Gorakhpur  
Email: [deepamdubey@nielit.gov.in](mailto:deepamdubey@nielit.gov.in)  
Mobile Number: +91-8317093874

**Sh. Nishant Pratap Singh (STA)**  
NIELIT Gorakhpur  
Email: [pratapnihant@nielit.gov.in](mailto:pratapnihant@nielit.gov.in)  
Mobile Number: 8317093882

**CLICK HERE TO REGISTER**