



## National Institute of Electronics and Information Technology

(An ISO 9001:2015 certified Organization)  
Ministry of Electronics and Information Technology  
Government of India

# VLSI Design using Verilog Online Course Prospectus

## Course Description

The course will introduce the participants to the Verilog hardware description language. It will help them to learn various digital circuit modeling issues using Verilog, writing test benches, and some case studies. The students will be able to gain a good knowledge about the Verilog Programming language and its applications.

## Who can attend?

Anyone who is interested to build their career in Designing, including:

- Beginners
- Professionals looking to upgrade their knowledge and expertise.
- Students who wish to pursue a career in designing.

## Course Content

- Introduction to VLSI and Digital circuit design flow
- Hardware Description Language (HDL) Coding Concepts
- Combinational circuits
- Sequential circuit Design
- Finite State Machine (FSM)
- System Design Using Field Programmable Gate Array (FPGA)
- Projects Using Verilog

## Prerequisite

Working knowledge computer basics.

## Duration

- 4 Weeks (without project) / 6 Weeks (with project)

The internship/industrial training programme includes about 40 Hrs of intensive interactive instructor-led online sessions and about 60 Hrs of practical assignments that student can perform at their end. In some training programmes, the facility of virtual lab can also be extended subject to availability. The six weeks programme includes two weeks (20 Hrs.) of project that student is required to develop and a presentation is to be made by student (in Online mode) to the faculty.

## Certificate

e-Certificate will be issued to each participant after completion of the training. The participant needs to maintain minimum 75% attendance during the online classes and is required to score minimum 50% marks in the online test in order to successfully complete the course.

## Minimum Requirements

- A computer with an internet connection and download privileges.
- Candidate must have latest PC / laptop with preferably 4 GB RAM or higher.

## How to Apply

Interested candidates may apply online on the link <https://nielit.gov.in/haridwar/content/online-courses> after submitting the Course Fee in following account:

<b>Name</b>	:	NIELIT Haridwar
<b>Account Number</b>	:	44306909591
<b>IFSC Code</b>	:	SBIN0012852
<b>Bank Name</b>	:	State Bank of India
<b>Branch</b>	:	Shivalik Nagar, Haridwar

**NOTE:** Copy of transaction slip is required to be uploaded at the time of filling online form. Candidate may keep a copy of the same for future reference.

## Terms and Conditions

1. In case, any registered candidate could not attend the online session due to technical issue at their side there will not be any refund of the course fee and the sessions will not be repeated.
2. In case, the online course is cancelled/postponed due to some technical issue at NIELIT side and new date is not convenient to the candidate, our liability is limited to the refund of the course fee and NIELIT shall not be responsible for any consequential damages.

## Course Coordinator

**Mr. Kailash Chandra Joshi**  
**Ph: 8171627088**  
**Email : [haridwar@nielit.gov.in](mailto:haridwar@nielit.gov.in)**



**NIELIT Haridwar** is the Regional Centre of NIELIT in the state of Uttarakhand and is situated in SIDCUL Haridwar. It is well known for the advanced training programmes in the areas of Future Skills such as **Cloud Computing, Machine Learning, Artificial Intelligence, Internet of Things, MATLAB, Big Data, Embedded Systems etc** in addition to the various **National Skill Qualification Framework (NSQF)** aligned long-term and short-term courses in Electronics & Information Technology. The Centre has **MOUs** with various prestigious institutions and Universities of Uttarakhand for academic collaboration, technical support, summer/industrial training and internships of the students. The Centre provides a conducive learning environment with the state-of-the-art infrastructure and expert faculties.

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## Dehradun Campus

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## Haidwar Campus

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