#### **Short Term Courses - NIELIT**

# **Certificate Course in VLSI Design**

### **Objective of the Course:**

This course aims to providing detailed knowledge in VLSI design process starting from digital design, hardware descriptive languages, RTI, synthesis & simulation, verification, FPGA programming & implementation. In this process the learners are well trained to understand the entire logic design process and are well equipped to take on the challenges posed by the even demanding chip design industry.

### **Learning Outcomes:**

After the end of the course the student will be able to complete a significant VLSI design project having a set of objective criteria and design constraints.

## **Expected Job Roles:**

**VLSI Engineer** 

**Duration of the Course** 

80 hrs

(in hours)

Appr. Fees (INR): Rs.8000/-

Minimum Eligibility Criteria and prerequisites, if any Engineering Graduates (Undergoing also)

### **Outline of Course**

S. No	Topic	Minimum No. of Hours
1.	Advanced digital Design	5 hrs
2.	CMOS Circuit Design	5 hrs
3.	HDL languages (VHDL, Verilog)	10 hrs
4.	FPGA Architecture	5 hrs
5.	ASIC	5 hrs
	Theory / Lecture Hours:	30 hrs
	Practical / Tutorial / Lecture Hours:	50 hrs
	Total Hours:	80 hrs

Books recommended for reference and

Introduction to VLSI systems

reading:

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Group Code: VLSI Group Name: VLSI

Course Code: CT01 Course Name: Certificate Course in VLSI Design