

VLSI Design

Course Certification: Certified by Nutan Infotronics Pvt. Ltd.

Course Duration: 16 Hr.

(Two days)



Digital Electronics:

3 Hrs

- Combinational Logic Design
- Sequential Logic Design
- State Machines



VHDL Modeling and Design Flow

5 Hrs

- Introduction to VLSI: complete VLSI design flow (with reference to an EDA tool)
- Sequential, Data flow, and Structural Modeling.
- Data types, Test benches
- Synthesizable, and non synthesizable statements
- Modeling in VHDL with examples of circuits such as counters, shift registers, bidirectional bus, multiplexer, demultiplexer, encoder, decoder etc.



Programmable Logic Devices

3 Hrs

- Programmable logic devices: Detail architecture, Study of PROM, PAL, PLA,
- Designing combinational circuits using PLDs.
- General Architecture of FPGA and CPLD



Programming on Xilinx ISE8.1

5 Hrs

- Creating new project
- HDL design entry
- Creating test bench waveform
- Simulating code and verification through waveform