

# Digital Design and Verification using Verilog HDL Part 2

## **Description:**

Lumostudy offers 1 month training program for students currently doing their B.E/B.Tech, M.E/M.Tech in Electronics/ Instrumentation/Electrical/ Telecommunication. This program is specifically designed with an objective to spark an interest in core electronics. The participants will get an opportunity to work on a project during the course.

All participants will be awarded a certificate upon successful completion of the program and all the assignments. Seats will be allotted on first -come-first-serve basis. There will also be assignments & online test submission on a weekly basis.

#### **Duration:**

• 3 weeks(15 hours)-(Daily 1 hour)

#### **Pre-requisites:**

- Basic of Digital
- Basic Understanding of Verilog

#### **Key takeaways:**

- Advance Digital Design concepts
- Verilog HDL concepts
- Analyze and use the improvements to tasks and functions
- Self-checking Test Bench Writing
- EDA tools Overview (ModelSim for Mentor)
- Project: Design and Verification of Synchronous FIFO

# **Eligibility Criteria:**

Anyone interested to learn.

#### **Tools/Software**

• ModelSim PE student edition

## **Key topics covered:**

### Week 1: (5 hrs, 1 hr/Day)

- Introduction to FSM- Melay and Moore FSM-FSM coding guidelines.
- Verilog coding styles for Modeling Melay and Moore—FSM Verification with an efficient testbench.
- Odd-Even example.

# Week 2: (5 hrs, 1 hr/Day)

- Introduction to ASM Charts and why it is used.
- Using ASM charts to model a Lift problem and the benefits of using it instead of using FSM.

## Week 3: (5 hrs, 1 hr/Day)

- Modeling Memory and writing simple test bench.
- Introduction to FIFO, Design and Verification from scratch.



Program Fee: Rs. 1,000 only

Registation Link: https://forms.gle/uDdgG7LjEf4TDw2d8