

KEY FEATURES

- 24×7 Support on exercises.
- **Free Demo classes**
- Case studies
- 4.7/5 rating
- Industry standard tools
- Two decade of experience
- World class course structure
- Expert mentorship on VLSI career
- 100% Placement Support
- Lifelong membership

COURSES OFFERED

DATA ENGINEERING

- Data Analytics
- Machine Learning
- Business Analytics
- Python

SYSTEM ENGINEERING

- IoT
- Hardware Design
- Embedded System
- VLSI Design

PRODUCT ENGINEERING

- Product Design
- Product Management
- Digital Marketing
- Start your Startup

SOFTWARE ENGINEERING

- AI
- Cloud
- Full Stack
- Develops

Location:

Center for Innovation
and Entrepreneurship,
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DESIGN NATION
IMPARTING EXCELLENCE

SYSTEM ENGINEERING

VLSI
DESIGN

Advanced VLSI Design
PG Diploma in VLSI
Advanced FPGA Design
Advanced VLSI Verification

COURSE

CURRICULLUM

ADVANCED VLSI DESIGN

1. Introduction to VLSI
2. Introduction to Linux
3. Advanced Digital Design
4. Static Timing Analysis
5. CMOS Fundamentals
6. Verilog HDL - RTL Coding and Synthesis
7. Code Coverage
8. Design Automation using Scripts Perl Implementation, together. This program is best suited for engineers starting their career in VLSI.

FGPA DESIGN

1. Introduction to VLSI
2. Advanced Digital Design
3. Verilog HDL - RTL Coding and Synthesis
4. Code Coverage
5. FPGA Architecture
6. FPGA Design Flow
7. FPGA Synthesis
8. FPGA Timing Closure
9. FPGA Implementation
10. Design Project

PG DIPLOMA IN VLSI DESIGN

1. Introduction to VLSI
2. Introduction to Linux
3. Advanced Digital Design
4. Static Timing Analysis
5. CMOS Fundamentals
6. Verilog HDL - RTL Coding and Synthesis
7. Code Coverage
8. FPGA Architecture
9. Verilog Mini Project RTL Coding and Synthesis

10. Design Automation using Scripts Perl
11. ASIC Verification Methodologies
12. System Verilog HVL
13. Verification Planning and Management
14. Advanced System Verilog
15. Assertion Based Verification - SVA
16. Verification Mini Project:
17. UVM - Universal Verification Methodology
18. Interfaces and Protocols
19. Industry Standard Project
20. Business communication

ADVANCED VLSI VERIFICATION

1. Verification Methodology Overview
 2. SystemVerilog Language Concepts
 3. System Verilog Datatypes
 4. System Verilog Memories
 5. SystemVerilog Tasks & Functions
 6. SystemVerilog Interfaces
 7. SystemVerilog Object Oriented Programming - Basics
 8. SystemVerilog Object Oriented Programming - Advanced
 9. UVM based Verification
- have good knowledge in Electronics where as for Embedded course its essential to have knowledge in C.

ABOUT THE COURSE

The VLSI Design and Verification Team, conducts research and training in the areas of VLSI Design and Verification.

The courses start with an exploratory project and ends with a comprehensive project. We offer courses VLSI Design, VLSI Verification and FPGA System Design. The Design course includes an in-depth focus on Digital Design, Synthesis, Verilog, while Verification course includes writing testbenches using System Verilog and UVM methodologies. FPGA system design teaches Synthesis, Simulation and Implementation of VLSI Design targeting FPGAs. These courses are offered online and in-class mode. The Diploma in VLSI Design program includes VLSI Design, VLSI Verification and FPGA Implementation, together. This program is best suited for engineers starting their career in VLSI.

INFRASTRUCTURE

1. ARM Cortex Board
2. Arduino Board
3. Raspberry Pi Mod-4 IoT Board
4. Arduino Uno Board
5. ARM Cortex starter kit
6. Xilinx SPartan-6 starter kit
7. Xilinx Zync starter Kit
8. 100+ Variety of Sensor
9. PIC and Rabbit 5000 Microcontrollers