

M.Tech. in VLSI Design and Embedded Systems

The rapid advancements in semiconductor technology and the increasing demand for intelligent electronic systems have created a significant need for experts in VLSI Design and Embedded Systems. This program is specifically designed to address this demand, equipping students with essential theoretical knowledge and practical expertise.

This program focuses on key areas such as Digital and Analog VLSI Design, ASIC/FPGA architectures, System Verilog, Physical Design, Embedded System development, Real-Time Operating Systems (RTOS), and System-on-Chip (SoC) technologies. Students gain valuable hands-on experience through training with industry-standard tools and platforms, ensuring preparedness for the professional world.

Eligibility:

B.Tech./B.E. in Electronics and Communication Engineering, Electrical and Electronics Engineering, Instrumentation Engineering and Biomedical Engineering.

Expected Outcomes:

The students will be able to gain knowledge and expertise in

- RTL Design, Verification, Chip design, Embedded software development, and Industry-standard EDA tools
- Optimizing complex electronic systems for performance, power, and area.
- Achieving high level of competency to address multidisciplinary and complex problems related to VLSI System Design.
- Designing and implementing robust solutions for IoT and Embedded systems.

Program Highlights:

- Industry-aligned curriculum with extensive lab sessions
- Hands-on training through Industry-standard EDA tools
- Emphasis on research, innovation, and dissertation work
- Focus on industrial training and real-world applications

Career Opportunities:

- RTL Design Engineer
- Verification Engineer
- Physical Design Engineer
- Analog/Mixed-Signal IC Design Engineer
- Embedded Systems Engineer
- IoT Solutions Architect