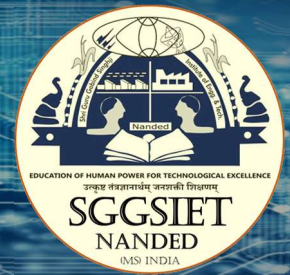# *Fast Forward* your career
M.Tech. (Embedded System and VLSI Design)

Department of Electronics and Telecommunication Engineering
Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded
Maharashtra, India PIN 431606 (Govt.-aided Autonomous Institute)

SGGSIET NANDED (MS) INDIA
EDUCATION OF HUMAN POWER FOR TECHNOLOGICAL EXCELLENCE

The names and logos of all companies are used without their formal permission for dissemination of information only.

The VLSI chip design and embedded system development is one of the fastest growing field. The advances have resulted in highly reliable and fast electronics systems in miniaturised scale. There is an urgent need to produce high quality engineers who are having sufficient skills to work in the VLSI industry. They should be able to design new VLSI chips and also embedded systems/IOT. Our M.Tech. (ES&VLSI) programme started in academic year 2015-16 with this objective.

About the Course

The foundation is built through courses like Modern Solid State Devices, Digital IC Design, Low power VLSI Design, Analog and Mixed Signal Design, etc. The skill development is done with focus on Front-End (FE) and Back-End (BE) designs, verification and testing. New emerging fields such as Internet of Things (IOT) are also given due weight. The program also offers strong knowledge and practical skills in developing various embedded solutions on advanced processors and microcontrollers, including that of RTOS skills.

Financial Support

Teaching assistantship of Rs. 5000/- per month for maximum of 7 months for non-GATE students in second year, if the students are working for their dissertation in campus.

Industry Connection

The curriculum was designed under the supervision of Industry stalwarts. Also, practical knowledge is gained through projects of their choice of domains, either through Industry Internships or on campus which has advanced facilities and relevant software/hardware.

So far, internships were offered from Intel (Bengaluru), Synaptics (Hyderabad), SoCtronics (Hyderabad), Applied Micro Circuits (Pune), Sankalp Semiconductors (Hubli), Tata Consultancy Services (Pune), Bit Mapper (Pune), CSIR-CEERI (Pilani), Rambus Chip Technologies (Bengaluru), and Chipspirit (Bengaluru). **About 30 internships were offered so far from the first four batches**.

Adjuct faculty positions are given to **Industry experts** from Intel, APM, Chipspirit, ekLaksya, 1RupeeST, Samsung, etc., for a few courses in the programmes, so that students get *first hand industry perspective* **while learning**. Students work on industry-level design suites such as Mentor (a Siemens Business), Cadence, Xilinx, etc.

Our first batch passed out in July 2017. So far almost all are placed in industry now! Following is the representative list of companies: Intel Bengaluru, Global Foundaries Bengaluru, Samsung Bengaluru, SignOff Semiconductors Bengaluru, Macom Pune, SoCtronics Hyderabad, HCL Bengaluru, Chipspirit Bengaluru, Quickcore Technologies Hyderabad, Laksh Semiconductors Bengaluru, Synapse Techno Design Innovations Bengaluru, and Tata Consultancy Services Pune.

Infrastructure and Facilities

Our laboratories are state-of-the-art: as required by industries. We have Industry standard software and technology where students can work. Mentor has collaborated with us to setup *Center for VLSI Design and Verification*, where they have donated *industry-level design and verification suite* comprising of Tanner S-Edit, L-Edit, T-Spice, Eldo®, Questa (including ModelSim®), ADMS, Calibre®, Catapult®, Vista™, Precision® Synthesis, LeonardoSpectrum™ ASIC, SystemVision®. We also have complete Cadence® research bundle. Our Embedded Systems and IoT Laboratory is also having modern equipment and tools.

Contact Details

Dr. Suhas S. Gajre, M.Tech. (ES&VLSI) Coordinator
ssgajre@sggs.ac.in, dean.il@sggs.ac.in
Phone: (02462) 269181/182/210
Mobile: (+91) 9421851011, 8208120091

http://www.sggs.ac.in