DIGITAL UNIVERSITY KERALA

Curating a responsible digital world

SCHOOL OF ELECTRONIC SYSTEMS AND AUTOMATION

Embedded SOC

DSP

ReRAM

IOT/CPS

Industry 4.0

Edge AI

Sensors

Intelligent Systems

Neuromorphic VLSI

IC design

Imaging

Robotics

M.TECH Electronics Engineering

Shape your career as a top notch Electronics Engineer

Program focus

The program provides very strong theoretical and practical foundations to solve real-world problems. We believe that flexibility in learning and assessment is important to growth of intelligent minds. Our program are meant to transform you to reach higher intellectual talent in demand for industry or academic worldwide. We believe in global competitiveness , and hence, the programs are at par or above international standards. Graduates of our programs can find jobs in a variety of fields within IT to Semiconductor streams. Its expected that many of you will become experts of IOT, Cyber-Physical Systems, IC design, AI systems, Industry 4.0 etc

Subjects you learn?

- Non-linear Circuit Theory
- Electronics for Edge AI
- Sensors for Drones and Robotics
- ASIC Physical Design
- Foundations of Signal Analysis
- Programming with DSP
- Digital Chip Design and Verification with Hardware
- Industry Experience Competency
- Sparse signals and Compressed Sensing
- AI System Analysis and Design
- Digital Manufacturing and Virtual Reality
- NEMS/MEMS and Systems
- Signal Decomposition & Recovery
- Robotics and Industrial Automation 4.0
- Quantum Computers and Applications
- Intelligent IOT and Sensor Manufacturing
- Digital Twins for AI Hardware
- Artificial General Intelligence and Robotics

Students can be involved in a wide range of projects, including that posed by industry, faculty research projects or student-led independent research projects

What We Do?

"RESEARCH, DISCOVER, INNOVATE"

AI Hardware

Design Integrated Circuits

Build Deep Neural Chips

Program FPGA/SOC/ASIC

Create Edge AI Applications

1. **PSO 1.** Apply the knowledge of IC design, circuit simulations, FPGA computing and programming to simulate parts of AI hardware.
2. **PSO 2**. Critically and systematically integrate knowledge to analyze, estimate solve complex problems and meet the challenges in the AI hardware.

Signal Processing and Automation

Design IOT/CPS Electronics

Build Imaging Systems

Program FPGA/DSP processors

Create Industry 4.0 Applications

1. **PSO 1.** Apply the knowledge of signal processing, sensors and programming to simulate parts of cyber physical systems and industry 4.0 in real-time platforms.
2. **PSO 2**. Critically and systematically integrate knowledge to analyze, estimate solve complex problems and meet the challenges in the Cyber Physical Systems, Industry 4.0 and Signal Processing

Innovate, research, Discover

Application Process

Eligibility
B.Tech or BE in Electronics/Electrical/Instrumentation/Biomedical/Robotics Engineering or other Circuit Branches or MSc in Electronics/Instrumentation. Graduates of CS/CSE or IT related branches are not eligible.

Must have a valid GATE score in circuit branches or qualify Digital University Digital Aptitude Test (DUAT) in electronics subject.

See admission page for marks requirements for undergraduate degree.

Apply
Only online applications are accepted. You can find more information by visiting the www.duk.ac.in

Our Professors

Contact our professors to find more about the program and for having informal discussions on the career opportunities in research and innovation.

LEARN MORE   www.duk.ac.in

Maker Village
THE ELECTRONICS INCUBATOR IN KERALA

As part of the M.Tech program the students develop electronic products in partnership with Maker Village as part of their project courses.

PATENT, PUBLISH, PRACTICE