

# M.S. THEMES

## Smart Grids and Power Systems

Renewable energy, electricity markets, next-generation power systems, optimization and analysis of power networks

## Internet of Things

Smart devices, intelligent transportation, cyber-physical and networked systems, edge computing

## Embedded Real-Time Systems

VLSI design, computer architecture, cyber-physical systems, low-latency computing, sensor networks

## Communications and Signal Processing

Fundamentals of wireless and network communications, algorithms for image, video, speech analysis, machine learning and pattern recognition techniques

## Advanced Materials and Devices

Novel materials; designing and fabricating electronic, optoelectronic, magnetic, spintronic, thermoelectric and other devices based on these materials

## Robotics and Computer Vision

Object recognition and tracking, video processing, automated systems, robot navigation and control

## Nanoscience and Nanotechnology

Novel electronic, optoelectronic, photonic devices and circuits; application to biomedical devices and renewable energy