

MSc in Electronics Engineering

ELECTRONICS SYSTEM DESIGN

CORE COURSES

EN-5301	Advance VLSI Design
EN-5302	ASIC Design Methodology
EN-5303	Mixed Signal Design
EN-5304	System on Chip Design
EN-5305	Semiconductor Devices and Technology

ELECTIVE COURSES

EN-5306	Experimental Methods in Electronics
EN-5307	FPGA-based Design
EN-5308	Analog Integrated Circuit Design
EN-5309	Digital Integrated Circuit Design
EN-5310	Digital System Synthesis
EN-5311	Integrated RF Transceiver Design
EN-5312	Integrated Sensors and Sensor Networks
EN-5313	Microprocessor/Microcontroller based System Design
EN-5314	Nano-Electronics and Nanotechnology
EN-5315	Nano-Fabrication and Characterization
EN-5316	Network-on-Chip Design
EN-5317	Physics of Semiconductors and Devices
EN-5318	Semiconductor Memories
EN-5319	System-on-Chip Testing and Verification
Research Thesis	
EN-5300	Research Thesis

SIGNAL PROCESSING

CORE COURSES

EN-5401	Advanced Transform Methods
EN-5402	Digital Signal Processing
EN-5403	Digital Speech Processing
EN-5404	Digital Image and Video Processing
EN-5405	Random Signals and Systems

ELECTIVE COURSES

EN-5406	Filter Design Techniques
EN-5407	Adaptive Signal Processing
EN-5408	Advanced topics in pattern recognition
EN-5409	Computer Vision

EN-5410	Estimation and Filtering
EN-5411	Fundamentals of Automatic Target Recognition
EN-5412	Intelligent Signal Processing
EN-5413	Introduction to Remote Sensing
EN-5414	Introduction to syntactic pattern recognition
EN-5415	Medical Imaging
EN-5416	Multidimensional Signal and Image Processing
EN-5417	Multi-rate Digital Signal Processing
EN-5418	Neural Pattern Recognition
EN-5419	Real Time Digital Signal Processing
EN-5420	Theory and applications of statistical pattern recognition
Research Thesis	
EN-5400	Research Thesis
INSTRUMENTATION AND PROCESS AUTOMATION	
CORE COURSES	
EN-5101	Random Signals and Systems
EN-5102	Optimization Methods in Systems and Control
EN-5103	Advanced Feedback Control
EN-5104	Industrial Instrumentation and Measurements
EN-5105	Multivariable Process Control
EN-5106	Discrete Event Control and Automation
EN-5107	Intelligent Control
EN-5108	Power Electronics and Variable Speed Drives