

Curriculum of the Program

PhD in Electronics Engineering	
CORE COURSES	
EN-6001	Advanced Engineering Mathematics
EN-6002	Random Processes and Statistics
EN-6003	Numerical Analysis
ELECTIVE COURSES	
ELECTRONICS SYSTEM DESIGN	
EN-6301	Compound Semiconductor Devices
EN-6302	Logic and Quantum Devices
EN-6303	Low-Power and Thermal Modelling Methodology
EN-6304	MEMS Design and Micro-machining
EN-6305	MEMS Sensors and Actuators
EN-6306	Optoelectronic Devices
EN-6307	Organic Electronic Devices
EN-6308	Semiconductor Material Characterization
EN-6309	IC Fabrication Processes
EN-6310	Special Topics in Electronic System Design
Research Thesis	
EN-6300	Research Thesis
SIGNAL PROCESSING	
EN-6401	Digital Signal Processing Applications
EN-6402	Advanced Digital Signal Processing
EN-6403	Estimation Theory
EN-6404	Detection Theory
EN-6405	Adaptive Filters
EN-6406	Modelling and Optimum Filters
EN-6407	Recursive Estimation and Optimal Filtering
Research Thesis	
EN-6400	Research Thesis
AUTOMATION AND CONTROL	
EN-6101	Large Scale Systems and Control
EN-6102	Multi-Agent Systems and Control
EN-6103	Robot Motion Planning and Control
EN-6104	Networked Control Systems
EN-6105	Distributed Parameter Systems
EN-6106	Vehicle Dynamics and Control
EN-6107	Automation Theory
EN-6108	Discrete-Event Systems and Control
EN-6109	Hybrid Control Systems
EN-6110	Recursive Estimation
EN-6111	Stochastic Estimation and Control – I
EN-6112	Stochastic Estimation and Control – II
Research Thesis	
EN-6100	Research Thesis