Electrical Engineering Course work

List of M.Sc. by Research / Ph.D. course work subjects that can be offered under Electrical Engineering Group from 2009

Group I		Group II		Group III		Group IV	
Subject Code	Name of the subject	Subject Code	Name of the subject	Subject Code	Name of the subject	Subject Code	Name of the subject
09 ECD 142	Dynamics of analog & Discrete Time Systems	09 EEM 141	Computer modelling of Electrical Power Systems	09 EES 141	Power System Instrumentation	09 EPS 142	Dynamics of Linear Systems
09 ECD 143	VLSI Design	09 EEM 142	Switched Mode Power Conversion	09 EES 144	Alternate Energy Sources	09 EPS 151	Energy Management Systems
09 ECD 144	Advanced Network Analysis and synthesis	09 EEM 151	Bio-Mass Energy Resources	09 EES 151	Digital Power System Protection	09 EPS 152	Digital Signal Processing
09 ECD 152	Protection techniques for Electrical Machines	09 EEM 152	Engineering Economics and Management	09 EES 242	Power System Reliability Engineering	09 EPS 241	HVDC Power Transmission

09 ECD 243	Design of analog and Discrete Time Control Systems	09 EEM 241	AI Applications to energy Management	09 EES 243	HVDC/EHVAC Transmission and FACTS	09 EPS 243	Non linear Automatic Control Theory
09 ECD 244	Non Linear Systems	09 EEM 242	Environmental Engineering and Pollution Control	09 EES 291	Software Engineering	09 EPS 252	AI Applications in Power Systems
09 ECD 251	Discrete Control Systems & Multi Variable Control	09 EEM 243	Computer Aided power system operation and Alalysis	09 EES 252	Parallel Processing in Power Systems	09 EPS 253	Power System Reliability Engineering
09 ECD 252	Computer Based Industrial Drive Control	09 EEM 251	HVDC Transmission	09 EES 253	Environmental Aspects of Power Generation and Transmission	09 EMS 252	Computer based industrial control
09 EMS 11	Analysis of Linear Systems	09 SCN 13	Distributed Computing	09 SCN 251	Optical Communications & Fiber Optic Networks	09 SCN 152	Multimedia Networks

09 SCN 11	Advanced Digital Communication	09 SCE 142	Computer Graphics	09 SCE 143	Digital Image Processing & Computer Vision	09 SCE 11	Computer Architecture
09 SCN 253	Client Server Programming & Application	09 SCE 13	Database Management Systems	09 SCE 151	Object Orinted Analysis & Design	09 SCE 152	Pattern Classification
09 SCE 12	Data Structure & Algorithms	09 SCE 21	Operating Systems & Linux Internals	09 SSE 22	Product Engineering	09 SCE 252	Embedded & Real Time Systems
09 SCE 153	Digital Signal Processing	09 SCS 141	Theoretiacl Foundations of Computer Science	09 SCS 152	Artificial Intelligence & Expert Systems	09 SCS 242	Data Warehousing & Mining
09 SCE 253	Complier Design Tools & Techniques	09 SIT 141	System Simulation & Modeling	09 SSE 151	Advanced Algorithms	09 SSE 153	Multimedia Information Systems
09 SCS 23	Computer Networks	09 SSE 23	Software Architeture	09 SSE 242	Software Quality Assurance & Testing	09 SSE 243	Systems Performance & Evaluation
09 SCE 22	Software	09 SCN 22	Cryptograph	09 EC 052	Multimedia	09 EC 097	High

	Engineering		y & Network Security		Communication		Performance Computing
09 SCN 21	Wireless & Mobile Networks	09 EC 056	Network Programmin g	09 EC 063	Power Semi-conductor devices	09 EC 035	Electrical machine dynamics
09 EC 023	Cryptograph y and Network Security	09 EC 0026	Design of Power Converters			09 EC 083	VLSI Technology
09 EC 036	Electromagn etic Compatibility	09 EC 078	Testing and verification of VLSI Circuits	09 EC 049	Micro computer control of electrical Drives	09 EC 062	Power electronics system Design with Ics
09 EC 002	Advanced Bio-medical Instrumentat ion	09 EC 042	HV- DC Power Transmission .	09 EC 051	Modeling and Simulation of Data networks	09 EC 091	Digital Switching Systems
09 EC 005	Advanced control systems	09 EC 039	Error Control Coding	09 EC 020	CMOS RF Circuit Design	09 EC 025	Design of Analog & Mixed mode VLSI Circuits
09 EC 006	Advanced Digital	09 EC 012	ASIC Design	09 EC 068	Radar Systems	09 EC 086	Wireless Communicati

	Communications						ons
09 EC 010	Algorithms for VLSI Design Automation	09 EC 028	Detection and Estimation	09 EC 053	Multirate Systems and Filter Banks	09 EC 079	Theory & Design of Bio-Medical Instruments
09 EC 011	Antenna Theory & Design	09 EC 038	Ergonomics	09 EC 041	Hardware - Software Co-design	09 EC 047	Low power VLSI Design
09 EC 017	Bio- medical Signal Processing	09 EC 037	Embedded System Design	09 EC 070	Real Time Embedded Systems	09 EC 077	Synthesis and Optimization of Digital Circuits
09 EC 027	Design of VLSI Systems	09 EC 032	Digital System Design Using VHDL	09 EC 060	Pattern Recognition	09 EC 075	Speech and Audio Processing
09 EC 029	Digital Circuits and Logic Design	09 EC 043	Image and Video Processing	09 EC 050	Mobile Computing	09 EC 055	NET Technology
09 EC 030	Digital Signal	09 EC 040	Ethernet Technology	09 EC 076	Statistical Signal	09 EC 092	Parallel Systems

	Compression				Processing		
09 EC 033	Distributed Computing	09 EC 082	VLSI System and Architecture	09 EC 084	Web Services	09 EC 094	Advanced Data Networks
09 EC 046	Linear Algebra	09 EC 067	Protocal engineering	09 EC 093	High Speed VLSI Design	09 EC 059	Optical communicatio n & Networking
09 EC 057	Network Protocal Design	09 EC 072	Soft Computing	EG-31*	RF & MMIC Design and Technology	-	-
09 EC 085	Wireless & ATM Networks	EG-21*	Vacuum and Thin film science and technology	EG-32*	Suggested Subject relevant to the chosen area Thin Film Instrumentation Technology.	-	-
EG-11*	Nanoelectron ics	EG-22*	Suggested Subject relevant to the chosen area Senors & application	-	-	-	-
EG-12*	GaAs and Related devices and	-	-	-	-	-	-

	Technology						
-	-	EC-23	Numerical Techniques in Electromagnetic	-	-	-	-
* This are new courses							