

Pre-Master's Courses:

Course Code	Course Title	Credit Hours
EE 511	Discrete Control Systems	0
EE 512	Automated Industrial Systems (I)	0
EE 514	Robotics	0
EE 543	Electrical Power Distribution	0
EE 544	Power Systems (3)	0
EE 522	Electrical Drives (2)	0
Subtotal		0

Core Courses:

Course Code	Course Title	Credit Hours
EE 703	Advanced Engineering Mathematics	3
EE 704	Digital Circuit Design	3
EE 705	Electrical Measurement systems	3
Subtotal	3 Courses * 3 Credit Hours	9

Elective Courses:

Course Code	Course Title	Credit Hours
EE 700	Directed Studies	3

Group (I) : Control Elective Courses

Course Code	Course Title	Credit Hours
EE 712	Linear Control systems	3
EE 713	Digital control Systems	3
EE 714	System Identification and Adaptive Control	3
EE 715	Optimal Control	3
EE 716	Fuzzy Systems	3
EE 717	Neural Networks and Neurocontrol	3
EE 718	Process Control	3
EE 719	Intelligent Control Systems	3

Group (II) : Power and Machines Elective Courses

Course Code	Course Title	Credit Hours
EE 721	Dynamics of Electrical Machines	3
EE 722	Computer–Aided Analysis of Electrical Machines	3
EE 723	Advanced Analysis and Design of Electric Motors	3
EE 724	Electrical Drives (3)	3
EE 725	Power Electronics (3)	3
EE 726	Vector Control of Electrical Drives	3
EE 727	Advanced Electrical Machines	3
EE 728	Industrial Power Conversion systems	3
EE 729	Generalized Theory of Electrical Machines	3
EE 740	Transients in Power Systems	3
EE 741	HVDC Power Transmission	3
EE 742	Electrical Insulation Engineering	3
EE 743	Power System Reliability	3
EE 744	Reactive Control in Electrical Power Systems	3
EE 745	Power System Control and Stability	3
EE 746	Computer Control of Power System	3
EE 747	Solid State Relays and their Applications	3
EE 748	Power System Analysis	3
EE 749	Renewable Energy Systems	3
Elective	5 Courses * 3 Credit Hours	15
Subtotal		

Research Thesis:

Course Code	Course Title	Credit Hours
EE 701	Master's Research Thesis (Part 1)	6
EE 702	Master's Research Thesis (Part 2)	6
Subtotal	2 Parts * 6 Credit Hours	12