

Scheme of Studies
Masters of Engineering Electrical (Electrical Power Systems)

Compulsory Courses				
No.	Course Code	Course Title	Credit hours	Remarks
1	EE-5001	Advanced Power System Analysis	3	Revised Course
2	EE-5003	Power System Operation and Control	3	Revised Course
3	EE-5004	Advanced Electrical Power System Protection	3	Revised Course
4	EE-5005	Distribution System Modelling and Analysis	3	Revised Course
5	EE-5006	Power System Stability	3	Revised Course
Elective Courses				
1	EE-5007	Advanced Electrical Power Transmission System	3	Revised Course
2	EE-5008	Power Distribution System Design	3	Revised Course
3	EE-5009	Computational Methods in Power System Analysis	3	Revised Course
4	EE-5010	Power System Reliability	3	Revised Course
5	EE-5011	Distributed Power Generation	3	Revised Course
6	EE-5012	Reactive Power Control	3	Revised Course
7	EE-5013	Electrical Machine Design	3	New Course
8	EE-5014	Power Quality and Electric Filters	3	New Course
9	EE-5015	High Voltage Engineering	3	New Course
10	EE-5016	Electrical Drives	3	New Course
11	EE-5017	Machine Learning	3	New Course
12	EE-5083	Energy Storage Systems	3	New Course
13	EE-5084	Renewable Energy Integration with Electrical Network	3	New Course
14	EE-5043	Advanced Digital Signal Processing	3	Code is Changed
15	EE-5081	Data Analytics	3	New Course
16	EE-5002	Thesis	6	Approved course

Scheme of Studies
Masters of Engineering Electrical (Smart Grid)

Compulsory Courses				
No.	Course Code	Course Title	Credit hours	Remarks
1	EE-5076	Advanced Electrical Power Systems	3	Code is Changed
2	EE-5077	Advanced Power Electronics	3	Code is Changed
3	EE-5078	Synchrophasor Technology	3	Code is Changed
4	EE-5079	Smart Grid Technologies and Applications	3	Code is Changed
5	EE-5080	Smart Grid Communication Protocols	3	Revised Course
Elective Courses				
1	EE-5081	Data Analytics	3	Revised Course
2	EE-5082	Electricity Markets, Business and Policy	3	Revised Course
3	EE-5083	Energy Storage Systems	3	Revised Course
4	EE-5084	Renewable Energy Integration with Electrical Network	3	Revised Course
5	EE-5085	Smart Grid System Security	3	Code is Changed
6	EE-5010	Power System Reliability	3	Revised Course
7	EE-5086	Electrical Load Forecasting	3	Code is Changed
8	EE-5087	FACTS Devices and HVDC System	3	Code is Changed
9	EE-5088	Energy Management Systems	3	Code is Changed
10	EE-5089	Smart Grids & Sustainable Electricity Systems	3	New Course
11	EE-5090	Electricity Pricing and Emissions	3	New Course
12	EE-5043	Advanced Digital Signal Processing	3	Revised Course
13	EE-5011	Distributed Power Generation	3	Revised Course
14	EE-5012	Reactive Power Control	3	Revised Course
15	EE-5017	Machine Learning	3	New Course
16	EE-5002	Thesis	6	Approved course

Scheme of Studies
Masters of Engineering Electrical (Control & Robotics)

Compulsory Courses				
No.	Course Code	Course Title	Credit hours	Remarks
1	EE-5026	Advanced Control System	3	Revised Course
2	EE-5027	Robot Dynamics and Control	3	New Course
3	EE-5028	Advanced Digital Control System	3	Revised Course
4	EE-5029	Adaptive Control Systems	3	Revised Course
5	EE-5030	Industrial Automation	3	New Course
Elective Courses				
1	EE-5031	Modern Control Theory	3	New Course
2	EE-5032	Non-Linear Control Systems	3	Revised Course
3	EE-5033	Estimation and Detection Theory	3	Revised Course
4	EE-5034	Optimal Control Systems	3	Revised Course
5	EE-5035	Intelligent Control Theory	3	New Course
6	EE-5036	Embedded Systems	3	New Course
7	EE-5037	Sensors and Actuators	3	New Course
8	EE-5038	Haptics, Human-Robotics & Metaverse	3	New Course
9	EE-5039	Mathematics for Control Systems	3	New Course
10	EE-5040	Autonomous Systems	3	New Course
11	EE-5041	Industrial Process Control	3	New Course

12	EE-5042	Robot Design & Fabrication	3	New Course
13	EE-5043	Advanced Digital Signal Processing	3	Revised Course
14	EE-5044	Probability and Stochastic Processes	3	Revised and Shifted from Compulsory
15	EE-5081	Data Analytics	3	New Course
16	EE-5016	Electrical Drives	3	New Course
17	EE-5017	Machine Learning	3	New Course
18	EE-5002	Thesis	6	Approved course

Scheme of Studies
Masters of Engineering Management (Energy Management)

Compulsory Courses				
No.	Course Code	Course Title	Credit hours	Remarks
1	EM-501	Organisational Systems	3	No Change
2	EM-502	Accounting and Financial Management	3	No Change
3	EM-503	Strategic Planning and Decision Making	3	No Change
4	EM-504	Project Management Framework and Tools	3	No Change
5	EM-505	Operations Research	3	No Change
Elective Courses				
1	EE-5051	Power Generation Economics	3	Revised Course
2	EE-5052	Energy Audits	3	Revised Course
3	EE-5053	Energy Conservation and Energy Efficiency	3	Revised Course
4	EE-5054	Power System Restructuring	3	Revised Course
5	EE-5011	Distributed Power Generation	3	Revised Course
6	EE-5055	Reliability Engineering	3	Revised Course
7	EE-5056	Energy Planning	3	Revised Course
8	EE-5012	Reactive Power Control	3	Revised Course
9	EE-5057	Asset Management and Condition Monitoring	3	New Course
10	EE-5059	Procurement Management	3	New Course
11	EE-5060	Energy Laws and Contracts	3	New Course
12	EE-5081	Data Analytics	3	New Course
13	EE-5002	Thesis	6	Approved course