

S.no.	Course code	Course name	Modules syllabi
Power System Engineering			
1	EEE-501	Analysis of Power Electronics Circuits	Review of power semiconductor devices and line commutated rectifiers, Choppers, Voltage Source Inverters, Current source inverters, AC Voltage Controllers and Cycloconverters
2	EEE502	Power Electronics Applications in Power Systems	Facts Devices, Power Quality improvement using custom power devices, HVDC Transmission, Static Excitation Systems
3	EEE503	Digital Control	Design of State space systems, State space methods, Quantization effects, Microprocessor and DSP control
4	EEE519	Power System Planning And Reliability	Long and short term planning .Load forecasting, Transmission system reliability model analysis, Two plant single load system, the loss of load approach
5	EEE520	Advanced Power System Protection	Classification Of Static Relays, Static Over Current Relays, Distance Protection, Pilot Relaying Schemes, AC Machines and Bus Zone Protection, Microprocessor Based Protective Relays
6	EEE521	Power System Dynamics And Stability	S,ystem Dynamics, Stability, Concept of Multimachine Stability, Excitation Systems
7	EEE522	Advanced Power System Analysis	Load Flow, DC power flow, Fault Studies, System optimization, State Estimation.
8	EEE523	HVDC Transmission	H.V.D.C. Transmission, Harmonics in HVDC Systems, Interaction between HV AC and DC systems, Transient over voltages in HVDC systems, Component Models for the Analysis of AC/DC Systems
9	EEE524	Electrical Distribution Systems	Distribution systems planning, Distribution transformers, Design considerations on primary systems, secondary systems, Distribution system Protection, Applications of Capacitors to distribution systems
10	EEE525	Power System Transients	Wave terminology, Current chopping in circuit breakers, Control of transients, Method of neutral grounding, Impulse generator development
11	EEE509	Power System Operation and Control	Real Power - Frequency Control, Reactive Power – Voltage Control, Economic Load Dispatch, Computer control of power systems