



SCHOOL OF RESEARCH & TECHNOLOGY

AN ISO 9001: 2008 Certified Institute

Course Outcomes		Department -	Electronics & Communication Engineering
Course Title:	Advanced Mathematics		
Course Code:	MTPS-101		
Program:	M.Tech	Semester -I	
Credits:	T-4	P-0	Total-4
Course Outcome			
1	Use knowledge and skills necessary for immediate employment or acceptance into a graduate program		
2	Read, understand and construct correct mathematical proofs and use the library to locate information		
3	Use mathematical techniques to solve well-defined problems and present their mathematical work		
4	Justify the use of our numeration system by comparing it to historical alternatives and other bases		
5	Propose new mathematical questions and suggest possible software packages		
Course Title:			
Advanced Power System Analysis			
Course Code:			
MTPS-102			
Program:			
M.Tech Semester -I			
Credits:			
T-4 P-0 Total-4			
Course Outcome			
1	To understand load flow, Network modeling, Conditioning of Y Matrix, Newton Raphson method		
2	Detail study of DC power flow.		
3	Study of balanced and unbalanced three phase faults and it's calculations		
4	Understanding the system optimization concepts and it's techniques.		
5	Study of State Estimation, method of least squares, statistics, errors, estimates etc.		
Course Title:			
Power System Protection			
Course Code:			
MTPS-103			
Program:			
M.Tech Semester I			
Credits:			
T -04 P-Nil Total-04			
Course Outcome			
1	Detailed analysis of static relays and amplitude comparators.		
2	Understanding the phase comparators and static over current relays.		
3	Understanding the static differential and distance relays.		
4	Introduction to multi input comparator and power swing.		
5	Understanding the Microprocessor Based Protective Relays.		

Course Title:	High Voltage Engineering		
Course Code:	MTPS-104		
Program:	M.Tech.	Semester : I	
Credits:	T-4	P-Nil	Total-4
Course Outcome			
1	Introduction to high voltage engineering and related terminology.		
2	Understanding the concepts of break down in dielectric materials.		
3	Understanding the generation & measurement of high voltages & currents.		

4	Detailed study of over voltages & insulation co-ordination.
5	Introduction of testing of materials & electrical apparatus.

Course Title:			
Course Code:	MTPS-105		
Program:	M.Tech	Semester - I	
Credits:	T - 04	P - Nil	Total - 04
Course Outcome			
1	E.H.V.A.C. Transmission line trends and preliminary aspect standard transmission voltages and other concepts.		
2	Electrostatic field and voltage gradients, calculations of electrostatic field of AC lines and related terms.		
3	Understanding the Electrostatic induction concepts, measurement of field and voltage gradients.		
4	To understand the concept of corona in E.H.V. lines.		
5	Design of EHV lines based on steady state and transient limits.		

Course Title:	LAB-I (Power System Protection)		
Course Code:	MTPS-106		
Program:	M.Tech	Semester: I	
Credits:	T-Nil	P-6	Total-6
Course Outcome			
1	Using MATLAB programs solve Power System Protection related problems.		
2	Presentation on Power System Protection Equipments.		

Course Title:	LAB-II (MATLAB- I)		
Course Code:	MTPS-107		
Program:	M.Tech	Semester: I	
Credits:	T-Nil	P-6	Total-6
Course Outcome			
1	Introduction to SIMULINK and other related concepts.		
2	Creating a simple Simulink model, simulate it, and analyze the result.		
3	Presentation on simulink models.		