Credit Hours: 3+1 Pre Requisite Introduction to Power Engineering Instructor: Prof. Dr. Tahir Nadeem Malik Lab Engineer: Nouman Qamar Compulsory/Elective: Elective If Elective: Depth Core/ Breadth Core: 2 Course Schedule: Lecture: Lab: 3 hours/week Course Assessment: Office hours: Quizzes: 3 Course Assessment: Quizzes: Quizzes: 10% Lab work: 10% Lab work: 20% Inde Semester: 20% Mid-Semester: 20% End-Semester: 40% Power System Analysis by Hadi Saadat Mc Graw-Hill International Editions. Reference Book: Power System Analysis by Turan Gonen Course Coljective: This course pash end esigned to introduce the importance of analyzing various aspects of power system. Course Learning Outcome CLO Statement PLO-1 Clu-2: To learn the basic concepts and development Clu-2: Course Learning Outcome CLO Statement PLO-1 Cl <th>Course Number and Title:</th> <th colspan="9">EE- 41A1Power System Analysis</th>	Course Number and Title:	EE- 41A1Power System Analysis								
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		Per unit system of Calculations 3 hours								

Admittance matrix formulation and power flow equations										6 hours				
Introduction to load flow analysis and its mathematical formula								mulatio	tion 3 hours					
				Load	l flow us	ing iterati	ve techni	iques				9 hours		
				Intro	duction t	o fault ar	alysis in	power sy	stem			3 hours		
				Balanced fault in power system								3 hours		ours
				Svm	metrical	compone	nts and u	nbalance	d faults			9 hours		ours
				Stab	ility anal	vsis							6 hours	
				Use	of digital	compute	r for stab	ility stud	ies			2 hours		ours
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Importance of the Early Analysis							m	CLO-4		PLO-1				
	Explanation of the fault Analysis in Electrical Power System,							,	CLO I		1201			
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Double line to ground faults								CL 0-1 2		PLO-12				
Three line to ground faults, Life to fine faults								CLO-1.2		PLO-1.2				
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