

## Lesson Planning

**Name of the Institute** : CRSSIET SILANI-KESHO, JHAJJAR  
**Name of the teacher** : Ms. Kritika Khunger  
**Department** : Electrical  
**Subject & Code** : COMPUTER APPLICATION TO POWER SYSTEM  
**ANLYSIS**  
**EE-409-F**  
**Branch/Semester** : EE 7th Semester

Chapter Covered	Topic	Academic Activity	Test/Assignment
Section-A INTRODUCTION:	Introduction to the growth of power systems	<ul style="list-style-type: none"> <li>• Presentation on Ferranti effect</li> <li>• Quiz based on presentation</li> </ul>	01 Test  01 Assignment
	Model representation of transmission line introduction		
	performance of transmission systems		
	Ferranti effect		
	security analysis		
	Piezo electric transducers		
	Contingency Analysis.		
Section-B:	Bus Admittance Matrix, Formation of Y Bus, Tree graph	<ul style="list-style-type: none"> <li>• Presentation on N R Method</li> <li>• Quiz based on presentation</li> </ul>	01 Test  01 Assignment
	Formulation of Y Bus using singular transformation		
	Load flow equations Approximate Load flow study		
	Gauss-Seidel method for Load flow Study		
	Newton-Raphson method for Load flow studies,		
Section-C	Fast Decoupled Load flow		
	Single line to ground fault		
	Line to Line fault		
	Double line to Ground fault and symmetrical fault	<ul style="list-style-type: none"> <li>• Presentation on Nanotechnology</li> <li>• Quiz based on presentation</li> </ul>	01 Test  01 Assignment
	Consideration of Pre fault currents. Symmetrical Components		
Section-D:	Review of symmetrical components		
	Sequence networks for synchronous machines		
	Bus Impedance matrix		
	Algorithm for formulation of Bus		
	All types of modifications		
	digital technique in short circuit Studies		
	Line to Line fault, Double line to Ground fault		01 Test

	Symmetrical fault. Consideration of Pre fault currents		01 Assignment
--	--	--	---------------