



University of Tehran
School of Electrical and Computer Engineering

Course:	8101485 - Power System Lab									
Course type:	EE*						CE*			Credit: 1
	Com	E	P	B	Con	D	SW	HW	IT	
	Required	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Elective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Level:	Undergraduate <input checked="" type="checkbox"/> Graduate <input type="checkbox"/>									
Co-requisite(s):	Power System Analysis2-8101111									
Prerequisite(s):	Power System Analysis1- 8101109									
Prerequisite by topic:	Knowledge of fundamentals of Power Systems									
Textbook(s):	Power system lab Manual									
Coordinator:	Afsharnia, Saeed									
Goals:	The aim of the course is to provide students with a complete overview of interconnected power system analysis and design.									
Outcome:	At the completion of the course students should be able to use of different Power system analysis softwares.									
Topics:	1- Transmission Lines Models 2- Newton Raphson Algorithm of Load Flow 3- Symmetrical & Unsymmetrical Faults 4- Transient Stability 5- Harmonic Analysis 6- Transient in Power Transformers									
Computer usage:	Digsilent EMTDC-PSCAD Matlab- Simulink									
Assignments:	-									
Projects:										
Grading:	Lab reports 50%									

	Final examination 50%
Further readings:	1. H. Saadat: <i>Power System Analysis – 3rd Edition</i> (McGraw Hill, 2011). 2. J.J. Grainger and W.D. Stevenson, Jr.: <i>Power System Analysis</i> (McGraw Hill, 1994).
Prepared by:	Afsharnia, Saeed
Date:	November 2017

*EE: Electrical Engineering CE: Computer Engineering IT: Information Technology