Course Code	TKEE165115
Course Name	Computer Applications in Electrical Power Systems
Course Instructors	Suharyanto; Lesnanto Multa Putranto;
Course Type	Elective
Course Classification	Engineering Topics
Credit / Contact Hour per Week	3 / 150 minutes per Week
Course Description	This course provides understanding to final students of Electrical Engineering Study Program on various computer applications as well as information and communication technology in Power System (STL)
Prerequisites Courses	-
Covered Student Outcome	**Fundamental and Engineering Knowledge (a)** **Modern Tools Utilization (e)**

Learning Outcome	1. Students are able to explain and describe the power system model and equations 2. Students are able to model the power system component for computer application 3. Students are able to compose, solve and analyze the power system control and optimization (in the computer programm) 4. Students are able to apply and analyze the power system problem in power system software (MATLAB, ATP, DIGSILENT, and ETAP)
Topic	1. Correlation of computer use, control, intelligent system to power system problems 2. Use of computers, computer applications, controls to improve power system performance 3. Technology applications on power system 4. Latest Technology Developments in power system (International Journal)
Direct Asessment	

Direct Asessment Plan	**Measured Learning Outcome**
Assignment or Quiz	
Mid Exam	LO1,LO2
Final Exam	LO1,LO2,LO3,LO4
Presentation and Workshop	LO2,LO3

Indirect Assesment	Questionnaire (EDOM)
References	[1] Buku Power System Analysis Book, Hadii Saadat [2]Buku Computer Methods In Power System Analysis Book by G W Stagg and A H El Abiad