1.	Title of the course	Power Systems
2.	Course number	EE305L
3.	Structure of credits	3-1-0-4
4.	Offered to	UG
5.	New course/modification to	Modification To EE3202/8
6.	To be offered by	Department of Electrical Engineering
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	**Course Objective(s):** To introduce modeling of different components of power systems and several tools for analyzing the system	
10.	**Course Content:** Introduction; Structure of power systems; Major components; Per unit representation; Transmission line parameters: resistance, inductance and capacitance; Transmission line modelling for steady state operation of power systems; Network modelling: bus admittance matrix; Power flow solution methods; Symmetrical faults; Symmetrical components; Unsymmetrical faults; Power system protection; Economic operation of power system; Basics of power system stability.	
11.	**Textbook(s):** 1. Grainger J J and Stevenson W D, *Power System Analysis*, McGraw Hill (1994).	
12.	**Reference(s):** 1. Bergen A R and Vittal V, *Power System Analysis*, Pearson Education (2009). 2. Saadat H,Power System Analysis, McGraw Hill (2002). 3. Glover J D, Sarma M S and Overbye T J, *Power System Analysis and Design,*, Cengage Learning India (2012). 4. Wadhwa C L, *Electrical Power Systems*, New Age International (2009).	