

Course title: Power System Engineering			
Course code: ENR 135	No. of credits: 3	L-T-P: 37-08-0	Learning hours: 45
Pre-requisite course code and title (if any): No			
Department: Sustainable Engineering			
Course coordinator: Prof. Naqui Anwer		Course instructor(s): Prof. Naqui Anwer	
Contact details: naqui.anwer@terisas.ac.in			
Course type: Programme Core		Course offered in : Semester 1	
Course description			
<p>It is very important to understand the characteristics, technologies and operation of conventional power system for generation, transmission and distribution of electrical energy. The programme is focused on renewable energy and therefore, it becomes more important to understand the functioning of conventional power system infrastructure first, so that the effects of increasing share of renewable energy can be understood. The course is designed to impart the knowledge of conventional power system equipments to the students. To work in a power industry, it is very important to understand the basic concepts of power systems and the related issues. Restructuring of power industry has increased the challenges even more. Hence, it is important for the renewable energy engineer to understand the basic concepts of power system operation, planning and analysis.</p>			
Course objectives			
<p>This course is designed to bring students of different disciplines to a certain level and to equip them with necessary knowledge of power systems. The objectives of the course are:</p> <ul style="list-style-type: none"> ▪ To impart knowledge about the methods of power generation, ▪ Understanding the transmission and distribution of electric power and related issues, ▪ Understanding the behaviour of power systems on variable load, and ▪ Determination of load flow analysis and economic load dispatch. 			