

<b>Course Number and Name</b>												
BEE047 & Power System Operation and Control												
<b>Credits and Contact Hours</b>												
3 & 45												
<b>Course Coordinator's Name</b>												
Dr. V. Jayalakshmi												
<b>Course Description</b>												
To understand the economics of power system operation with thermal and hydro units, To realize the requirements and methods of real and reactive power control in power system and to be familiar with the power system security issues and contingency												
<b>Prerequisites</b>						<b>Co-requisites</b>						
Transmission & Distribution						Nil						
required, elective, or selected elective (as per Table 5-1)												
Required												
<b>Course Outcomes (COs)</b>												
CO1: An overview of power system operation and control.												
CO2: Basics of speed governing mechanism, modelling and speed-load characteristics.												
CO3: Generation and absorption of reactive power.												
CO4: Formulation of economic dispatch problem and incremental cost curve coordination equations without and with loss (No derivation of loss coefficients).												
CO5: Know the concept of energy control centre.												
<b>Student Outcomes (SOs) from Criterion 3 covered by this Course</b>												
COs/SOs	a	b	c	d	e	f	g	h	i	j	k	l
CO1	M	H	M	M	M	L	M	L	M	L	L	M
CO2	H	H	M	M	H	M	M	L	H	M	L	M
CO3	H	H	M	H	H	H	M	M	M	M	L	M
CO4	H	H	H	H	H	H	M	M	L	M	L	M
CO5	H	H	H	H	M	M	M	M	L	M	L	M