

Course Number and Name												
BEE302 & Electrical Machines-I												
Credits and Contact Hours												
3 & 45												
Course Coordinator's Name												
Mrs.Anitha Sampathkumar												
Course Description												
To give the students a fair knowledge on the working of various DC machines & Transformers												
Prerequisites						Co-requisites						
Basic Electrical & Electronics Engineering						Nil						
required, elective, or selected elective (as per Table 5-1)												
Required												
Course Outcomes (COs)												
CO1: To familiarize the constructional details, the principle of operation, prediction of performance, the methods of testing the transformers and three phase transformer Connections.												
CO2: To introduce the principles of electromechanical energy conversion in singly and multiply excited systems.												
CO3: To study the working principles of electrical machines using the concepts of electromechanical energy conversion principles and derive expressions for generated voltage and torque developed in all Electrical Machines.												
CO4: To study the working principles of DC machines as Generator and Motor, types, determination of their no-load/load characteristics, starting and methods of speed control of motors.												
CO5: To estimate the various losses taking place in D.C. machines and to study the different testing methods to arrive at their performance.												
Student Outcomes (SOs) from Criterion 3 covered by this Course												
COs/SOs	a	b	c	d	e	f	g	h	i	j	k	l
CO1	H	H	L	L	H	M	M	L	L	L	L	L
CO2	H	H	L	L	M	M	M	L	L	L	L	L
CO3	H	H	L	L	H	M	M	L	L	L	L	L
CO4	H	H	L	L	H	M	M	L	L	L	L	L
CO5	H	H	L	L	H	M	M	L	L	L	L	L