Shram Sadhana Bombay Trust's
COLLEGE OF ENGINEERING & TECHNOLOGY
BAMBHORI, POST BOX NO. 94, JALGAON- 425001. (M.S.)
Included Under Section 2(f) & 12(B) of the UGC Act, 1956
ISO 9001:2015 Certified

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ATTAINMENT OF PROGRAMME OUTCOMES AND COURSE OUTCOMES

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2.6.2. Attainment of Programme outcomes and course outcomes are evaluated by the institution.

The institute has practice of measuring the level of attainment of Program Outcomes (POs),Program Specific Outcomes (PSOs), and Course Outcomes (COs) as per the syllabus by K.B.C.North Maharashtra University, Jalgaon (M.S.). Broadly the tools used for the assessment of POs & PSOs involve CO attainment through University results.

In every semester, CO attainment is evaluated based on the University results. The syllabus has University Assessment, known as End Semester Examination (ESE) for theory and practical, and College Assessment, known as Internal Continuous Assessment (ICA) for practical and Internal Sessional Examination (ISE) for theory. The University assessment contributes 60% and college assessment contributes 40% towards the attainment of CO for each subject (Theory and Practical). For each subject, the CO attainment level, i.e. Level – 1, Level – 2, Level – 3, is calculated based on the percentage of students scoring more than University average mark in the ESE and percentage of students scoring more than college average marks in the ISE / ICA respectively. Level – 1 is defined as 30%, Level – 2 is defined as between 31% to 60% and Level– 3 is defined as above 60%.

Based on the mapping of COs with POs and PSOs, the respective CO attainment contributes tothe attainment of POs and PSOs as direct assessment tool. Attainment of POs and PSOs arecalculated for each batch at their end of programme.

CO-PO-PSO Mapping B.E. Electrical Engineering

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
FE	I	B.E. Electrical	Physics	816101.1	2	2	2				2					2			
				816101.2	2	2	2				2					2			
				816101.3	2	2	2				2					2			
				816101.4	2	2	2				2					2			
				816101.5	2	2	2												
				816101.6	2	2	2		3										
				816101	**2**	**2**	**2**		**3**		**2**					**2**			
FE	I	B.E. Electrical	Mathematics - I	816102.1	3	3	2												
				816102.2	3	2	3												
				816102.3	3	3	2												
				816102.4	3	2	2												
				816102	**3**	**2.5**	**2.25**												
FE	I	B.E. Electrical	Basic Electrical & Electronics Engineering	816103.1	3	3													
				816103.2	3	3													
				816103.3	3	2													
				816103.4	3	2													
				816103.5	3	2													
				816103.6	3	2													
				816103.7	3	2													
				816103	**3**	**2.28**													
FE	I	B.E. Electrical	Programming for Problem Solving	816104.1	3	2	2	1		2	1					2			

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816104.2	3	2	2	1		2	1					2			
				816104.3	3	2	2	1		2	1					2			
				816104.4	3	2	2	1		2	1					2			
				816104.5	3	2	2	1		2	1					2			
				816104.6	3	2	2	1		2	1					2			
				816104	**3**	**2**	**2**	**1**		**2**	**1**					**2**			
FE	I	B.E. Electrical	Physics Lab	816105.1	3	3	3	3	3			1	1	2	2	2			
				816105.2	3	3	3	3	3					2		1			
				816105.3	3	2	2	2	1				1	1					
				816105.4	3	2	1	3	3					2		1			
				816105.5	3	2	1	1	2					1					
				816105.6	3	3	3	3	3			1	1	2	2	2			
				816105	**3**	**2.5**	**2.17**	**2.5**	**2.5**			**1**	**1**	**1.666**	**2**	**1.5**			
FE	I	B.E. Electrical	Basic Electrical and Electronics Engineering Lab.	816106.1	2	2													
				816106.2	3	3													
				816106.3	3	2													
				816106.4	2	2													
				816106.5	2	2													
				816106.6	2	2													
				816106	**2.33**	**2.16**													
FE	I	B.E. Electrical	Programming for Problem Solving Lab	816107.1	3	2	2	1		2	1					2			
				816107.2	3	2	2	1		2	1					2			

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816107.3	3	2	2	1		2	1					2			
				816107.4	3	2	2	1		2	1					2			
				816107.5	3	2	2	1		2	1					2			
				816107.6	3	2	2	1		2	1					2			
				816107	**3**	**2**	**2**	**1**		**2**	**1**					**2**			
FE	II	B.E. Electrical	Chemistry	816201.1	2	2					2					2			
				816201.2	2	2	2		2		2					2			
				816201.3	2						2					2			
				816201.4	2	2	2				2					2			
				816201.5	2	2	2		2							2			
				816201	**2**	**2**	**2**		**2**		**2**					**2**			
FE	II	B.E. Electrical	Engineering Graphics	816203.1	3	3	3		3					3					
				816203.2	3	2	3		3					2					
				816203.3	3	3	3		3					3					
				816203.4	2	2	3		3					3					
				816203	**2.75**	**2.5**	**3**		**3**					**2.8**					
FE	II	B.E. Electrical	English	816204.1	2							2		2					
				816204.2	2				2			2		2					
				816204.3	2									2					
				816204.4	2										2				
				816204	**2**				**2**			**2**		**2**	**2**				
FE	II	B.E. Electrical	Mathematics-II	816202.1	3	3	2												
				816202.2	3	3	2	1											

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816202.3	3	3	3												
				816202	**3**	**3**	**2.33**	**1**											
FE	II	B.E. Electrical	Chemistry Lab	816206.1	3	2	3			2	2					2			
				816206.2	3	2	2			2	2					2			
				816206.3	3	2	2			2	2					2			
				816206.4	3	2	3			2	2					2			
				816206	**3**	**2**	**2.5**			**2**	**2**					**2**			
FE	II	B.E. Electrical	Engineering Graphics Lab	816207.1	3	3	3		3					3					
				816207.2	3	2	3		3					2					
				816207.3	3	3	3		3					3					
				816207.4	2	2	3		3					3					
				816207	**2.75**	**2.5**	**3**		**3**					**2.75**					
FE	II	B.E. Electrical	English Lab	816208.1	2							2		2					
				816208.2	2							2		2					
				816208	**2**							**2**		**2**					
FE	II	B.E. Electrical	Workshop Practices	816205.1	3	3	2	3	3			1	2	1					
				816205.2	3	3	2	3	3			1	2	1					
				816205.3	3	3	2	3	3			1	2	1					
				816205.4	3	3	2	3	3			1	2	1					
				816205	**3**	**3**	**2**	**3**	**3**			**1**	**2**	**1**					
SE	III	B.E. Electrical	Engineering Mathematics- III	816301.1	3	3	1	1	1	1						3	3		
				816301.2	3	3	1	1	1	1						3	3		

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816301.3	3	2	1	1	1	1						3	3		
				816301.4	3	2	1	1	1	1						3	3		
				816301.5	3	3	1	1	1	1						3	3		
				816301	**3**	**2.6**	**1**	**1**	**1**	**1**						**3**	**3**		
SE	III	B.E. Electrical	Numerical Techniques	316302.1	3	3	1	1	2	1						3	2	2	1
				316302.2	3	2	1	1	1	1						3	3		
				316302.3	3		1	2	1	1						3	2		1
				316302.4	3	2	1	1		1						3	3	1	
				316302.5	3	3	1	1	1	1						3	2	2	
				316302	**3**	**2.5**	**1**	**1.2**	**1.25**	**1**						**3**	**2.4**	**1.667**	**1**
SE	III	B.E. Electrical	Electrical Circuit Analysis	816303.1	3	1	1			1						2	3	1	3
				816303.2	3	2	1		2	1						2	2		1
				816303.3	3	2	2	2	2	1						2		2	
				816303.4	3	2	3	2	2	1						2	2	1	
				816303.5	3	2	2		2	1						2	2	2	
				816303	**3**	**1.8**	**1.8**	**2**	**2**	**1**						**2**	**2.25**	**1.5**	**2**
SE	III	B.E. Electrical	Electrical Machine -I	816304.1	3	2											3		
				816304.2	3	3	1	2										2	
				816304.3	3	2	2	3											2
				816304.4	3	3	2	3	1							2	3		
				816304.5	3	2	2	2	1							2			2
				816304	**3**	**2.4**	**1.75**	**2.5**	**1**							**2**	**3**	**2**	**2**
SE	III	B.E. Electrical	Industrial Organization and Management	816305.1						1					3	1		2	3

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816305.2								1			3		2	3	2
				816305.3			3						2				3	3	2
				816305.4								2		3	3	2	2		3
				816305.5						3				2	3			2	
				816305			**3**			**2**		**1.5**	**2**	**2.5**	**3**	**1.5**	**2.333**	**2.5**	**2.5**
SE	III	B.E. Electrical	Electrical Circuit analysis LAB	816306.1	3	1		2		2					2	2	3		
				816306.2	3	2	2				2	2	2	2	1			2	
				816306.3	3	3		1	2	1	1			1		1	2		
				816306.4	3	3	2	3		1	3	1	2	2		2			2
				816306.5	3	2	2	3	3			2	1		2		3		
				816306	**3**	**2.2**	**2**	**2.25**	**2.5**	**1.33**	**2**	**1.67**	**1.67**	**1.667**	**1.667**	**1.667**	**2.667**	**2**	**2**
SE	III	B.E. Electrical	Electrical Machine-I LAB	816307.1	3	1											3		
				816307.2	3	3	2	2										3	
				816307.3	3	2	2	2								2			2
				816307.4	3	3	2	2		2							3		
				816307.5	3	2	2	2				2							2
				816307	**3**	**2.2**	**2**	**2**		**2**		**2**				**2**	**3**	**3**	**2**
SE	III	B.E. Electrical	Electrical Workshop LAB	816308.1	3	2											2		
				816308.2	3		3		2								2	1	
				816308.3		2	3	2					1		2	1	2	1	1
				816308.4	3	2	3										2	1	1
				816308.5								3	2				1	1	2
				816308	**3**	**2**	**3**	**2**	**2**			**3**	**1.5**		**2**	**1**	**1.8**	**1**	**1.333**

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
SE	IV	B.E. Electrical	Biology	816401.1	2	2	2			1	1							2	
				816401.2						2	1	1				1		1	
				816401.3	1				1	1								1	1
				816401.4	1		2	1		1	1		1					2	
				816401.5	1	1	1	1		2	1					1			
				816401	**1.25**	**1.5**	**1.67**	**1**	**1**	**1.4**	**1**	**1**	**1**			**1**		**1.5**	**1**
SE	IV	B.E. Electrical	Electrical Engineering Materials	816402.1	3					2	1					1	3		
				816402.2	2	1				1						1		2	
				816402.3	2	1		2		1						1	3		
				816402.4	2					2				3		1	3		
				816402.5	3			2		1	2					1	2		
				816402	**2.4**	**1**		**2**		**1.4**	**1.5**			**3**		**1**	**2.75**	**2**	
SE	IV	B.E. Electrical	Analog and Digital Electronics	816403.1	3								2				3		2
				816403.2		3				2							3		
				816403.3	2									3					
				816403.4	2				3		1								
				816403.5			3	2										2	
				816403	**2.33**	**3**	**3**	**2**	**3**	**2**	**1**		**2**	**3**			**3**	**2**	**2**
SE	IV	B.E. Electrical	Electrical Machine-II	816404.1	3	2											3		
				816404.2	3	3	2	3										2	
				816404.3	3	3	2	3						3		2	3		
				816404.4	3	2	1	3											2
				816404.5	3	1	1	3									3		

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816404	**3**	**2.2**	**1.5**	**3**						**3**		**2**	**3**	**2**	**2**
SE	IV	B.E. Electrical	Entrepreneurship Development	816405.1							3	3				3			2
				816405.2							3	2	3		1	2			2
				816405.3									1		2	2		2	
				816405.4							2	2		1		2	2		
				816405.5								2	2			2		2	
				816405							**2.67**	**2.25**	**2**	**1**	**1.5**	**2.2**	**2**	**2**	**2**
SE	IV	B.E. Electrical	Electrical Engineering Materials LAB	816406.1	3	3	3		1		1			1	1		2		
				816406.2	3	2	2	2		2				3	1			3	
				816406.3	3	2	2	1	2		2			1	3		2		
				816406.4	3	3	1	3		3	3	1		2	2	2		2	
				816406.5	3	2	3	2	2				2			1	3		
				816406	**3**	**2.4**	**2.2**	**2**	**1.67**	**2.5**	**2**	**1**	**2**	**1.75**	**1.75**	**1.5**	**2.333**	**2.5**	
SE	IV	B.E. Electrical	Analog and Digital Electronics LAB	816407.1	3								2				3		2
				816407.2		3				2							3		
				816407.3	2									2					
				816407.4	2				3		1								
				816407.5			3	2				3						2	
				816407	**2.33**	**3**	**3**	**2**	**3**	**2**	**1**	**3**	**2**	**2**			**3**	**2**	**2**
SE	IV	B.E. Electrical	Electrical Machine-II LAB	816408.1	3	2						3		2			3		
				816408.2	3	3	2	3									3		
				816408.3	3	2	2	3										2	

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816408.4	3	2	2	3								2	3		
				816408.5	3	1	1	1		2						2			2
				816408	**3**	**2**	**1.75**	**2.5**		**2**		**3**		**2**		**2**	**3**	**2**	**2**
SE	IV	B.E. Electrical	Measurement and Instrumentation LAB	816409.1	2	2	1	2					2	3			**3**	**2**	
				816409.2		2	2						2				**3**		
				816409.3	3	1	2	1					2				**2**		
				816409.4	2	3	3	3					2				**3**		
				816409.5	3	2	3	2					2						**1**
				816409	**2.5**	**2**	**2.2**	**2**					**2**	**3**			**2.75**	**2**	**1**
TE	V	B.E. Electrical	Power Electronics	816501.1	3											2	3		
				816501.2		3	2		2								3		2
				816501.3		3		2										3	
				816501.4	3	2	2	2			2		2					2	
				816501.5	3													2	
				816501	**3**	**2.67**	**2**	**2**	**2**		**2**		**2**			**2**	**3**	**2.333**	**2**
TE	V	B.E. Electrical	Power System -I	516502.1	3	1	2	1								1	1		
				516502.2	2	2	2	1									1		
				516502.3	3	2	2	1										1	
				516502.4	2	2	2	1										1	
				516502.5	2	2	2	1										1	
				516502	**2.4**	**1.8**	**2**	**1**								**1**	**1**	**1**	
TE	V	B.E. Electrical	Electromagnetic Field	516503.1	3			3								**1**	**3**		

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				516503.2	3		2		2				1				**3**		
				516503.3	3	2										**1**		**2**	
				516503.4	3	2										**1**		**2**	
				516503.5	3				1							**1**	**3**		
				516503	**3**	**2**	**2**	**3**	**1.5**				**1**			**1**	**3**	**2**	
TE	V	B.E. Electrical	Signals and Systems	516541.1	3	2										2	2	2	
				516541.2	2	3	2	3	2							2		1	
				516541.3	3	1		3	2							2	2		2
				516541.4	2	2	2	2	2							2		2	
				516541.5	3	2	3	2								2	1		
				516541	**2.6**	**2**	**2.33**	**2.5**	**2**							**2**	**1.667**	**1.667**	**2**
TE	V	B.E. Electrical	Electronics Mesurement	516552.1	3	2		2	2								**3**		
				516552.2	3		2	2	2								**3**	**2**	
				516552.3	3	2	2		2								**2**		
				516552.4	3	2			2								**2**		
				516552.5	3	2			2							1	**2**		**1**
				516552	**3**	**2**	**2**	**2**	**2**							**1**	**2.4**	**2**	**1**
TE	V	B.E. Electrical	Power Electronics Lab	816506.1	3											2	3		
				816506.2		3	2		2								3		2
				816506.3		3		2										3	
				816506.4	3	2	2	2			2		2					2	
				816506.5	3													2	
				816506	**3**	**2.67**	**2**	**2**	**2**		**2**		**2**			**2**	**3**	**2.333**	**2**
TE	V	B.E. Electrical	Power System-I LAB	816507.1	1	2	2										2	2	

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816507.2	2	2	2	1									2	2	
				816507.3	2	2	2	1									2	3	
				816507.4	2	2	2	1									2	3	
				816507.5	2	2	2										2	3	
				816507	**1.8**	**2**	**2**	**1**									**2**	**2.6**	
TE	V	B.E. Electrical	Electronic Design Lab	816508.1	3		3	2									3		
				816508.2		2	2	3									2	3	
				816508.3		2	3		3								2	3	
				816508.4		3		2		1						1		2	3
				816508.5				3							3	2		2	3
				816508	**3**	**2.33**	**2.67**	**2.5**	**3**	**1**					**3**	**1.5**	**2.333**	**2.5**	**3**
TE	V	B.E. Electrical	MP-I	816509.1	3	3											3		
				801659.2	3		3	3		3	3	3						2	
				786809.3									3	3	3			2	
				771959.4	3				3										3
				757109.5												3			3
				757109	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**2**	**3**
TE	VI	B.E. Electrical	Control System	616601.1	3	3		2	2				2	2		2	1		2
				616601.2	3	3	3	2	3				2	2		2	3	3	3
				616601.3	3	3	3	2	3				2	2		2	3	3	3
				616601.4	3	3	3	2	3				2	2		2	3	3	3
				616601.5	3	3	3	2	3					2		2	3	3	3
				616601	**3**	**3**	**3**	**2**	**2.8**				**2**	**2**		**2**	**2.6**	**3**	**2.8**

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
TE	VI	B.E. Electrical	Microprocessor and Microcontroller	616602.1	2	2	3		3				3				3		2
				616602.2	2		3	3	3								2	3	2
				616602.3			3	3									3		1
				616602.4	3	3	2							2			2	3	
				616602.5		3			2	2				2		3			3
				616602	**2.33**	**2.67**	**2.75**	**3**	**2.67**	**2**			**3**	**2**		**3**	**2.5**	**3**	**2**
TE	VI	B.E. Electrical	Power System-II	616603.1	2	2	1									1	1	2	
				616603.2	2	2		2								1	2	2	
				616603.3	2	2		2								1	2	2	
				616603.4	2	2		2								1	2	2	
				616603.5	2	2	1	2								1	1	2	
				616603	**2**	**2**	**1**	**2**								**1**	**1.6**	**2**	
TE	VI	B.E. Electrical	Industrial Automation (PROF ELECT 2)	816641.1	3	2	2	1		3						2	3		3
				816641.2	1	1	2	2		2			2			2	2	3	3
				816641.3	1	1	2	2		1						1	3	2	3
				816641.4	2	1	3	2		2						3	3	3	
				816641.5	1	3	3	2		2						3	3	3	3
				816641	**1.6**	**1.6**	**2.4**	**1.8**		**2**			**2**			**2.2**	**2.8**	**2.75**	**3**
TE	VI	B.E. Electrical	Linear Integrated circuits And its Applications	616652.1	3												3		
				616652.2		3	2										3		2
				616652.3	2	3		2										3	

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				616652.4	3		2	2										2	
				616652.5	3	2			2									2	
				616652	**2.75**	**2.67**	**2**	**2**	**2**								**3**	**2.333**	**2**
TE	VI	B.E. Electrical	Control System LAB	816606.1	2	2										1	3		
				816606.2	2	2										1			
				816606.3	2	2										1	3		
				816606.4	2	2		2								1	1	2	3
				816606.5	2	2		2								1	1	2	3
				816606	**2**	**2**		**2**								**1**	**2**	**2**	**3**
TE	VI	B.E. Electrical	Microprocessor and microcontroller LAB	816607.1		2			2								3		2
				816607.2	2	3		2	2								3	2	
				816607.3	2				2					3				2	2
				816607.4	2			2	2		3			3			3	2	3
				816607.5		2					2			2					3
				816607	**2**	**2.33**		**2**	**2**		**2.5**			**2.667**			**3**	**2**	**2.5**
TE	VI	B.E. Electrical	Power System-II LAB	816608.1	2	2										1	2	2	
				816608.2	2	2		1								1	2	2	
				816608.3	2	2		1								1	2	2	
				816608.4	2	2		2								1	1	2	
				816608.5	2	2		1								1	1	2	
				816608	**2**	**2**		**1.25**								**1**	**1.6**	**2**	
TE	VI	B.E. Electrical	MINOR PROJECT	816609.1	3	3											3		
				816609.2	3		3	3		3	3	3						2	

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816609.3									3	3	3			2	
				816609.4	3				3										3
				816609.5												3			3
				816609	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**2**	**3**
BE	VII	B.E. Electrical	Electrical Drives	716701.1	3						1		2		2		3	2	2
				716701.2	3	3	2	2					3			1	3		
				716701.3	3	3	1	3								1	3		
				716701.4	3	3	3	2					2		1	1		2	
				716701.5	3		3		2							1	3		
				716701	**3**	**3**	**2.25**	**2.33**	**2**		**1**		**2.33**		**1.5**	**1**	**3**	**2**	**2**
BE	VII	B.E. Electrical	Electrical Energy Conservation and Auditing	716721.1	3					2	3	3					2		1
				716721.2	3	3	3	3									2	1	
				716721.3	3	3	3		3					2	3	2	2		
				716721.4	3	3	3	3		2		3					2	1	
				716721.5	3		2	2					3		3	2	2	2	2
				716721	**3**	**3**	**2.75**	**2.67**	**3**							**2**	**2**	**1.333**	**1.5**
BE	VII	B.E. Electrical	Power System Dynamics and Control	716731.1	3	2	2	2	2	2	-	-	2	2	-	3	3	3	3
				716731.2	3	2	2	2	2	2	-	-	2	-	-	3	3	2	2
				716731.3	3	2	2	2	2	2	-	-	2	-	-	3	3	2	2
				716731.4	3	2	2	2	-	-	-	-	2	-	-	2	2	2	2
				716731.5	3	2	2	2	-	-	-	-	2	-	-	2	2	2	2
				716731	**3**	**2**	**2**	**2**	**2**	**2**			**2**				**2.6**	**2.2**	**2.2**

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
BE	VII	B.E. Electrical	VLSI Design and Technology	716741.1	**3**	3	3		3								3	3	3
				716741.2	3	3	3		3								3	3	3
				716741.3	3	3	3	2	3								3	3	3
				716741.4	3	3	3	2	3								2	2	3
				716741.5	0				2				2				2	2	2
				716741	**2.4**	**3**	**3**	**2**	**2.8**				**2**				**2.6**	**2.6**	**2.8**
BE	VII	B.E. Electrical	Electrical Drives LAB	716705.1	3	3		2				2	2			1	**3**		
				716705.2	3	3	1	2	1				2			1	**2**	**1**	
				716705.3	3	3	2	2					2			1	**3**		
				716705.4	3	3	2	2	1			2	2			1	**3**	**1**	
				716705.5	3	3	2	2					2			1	**2**		**1**
				716705	**3**	**3**	**1.75**	**2**	**1**			**2**	**2**			**1**	**2.6**	**1**	**1**
BE	VII	B.E. Electrical	MATLAB Application Lab	716706.1	3				3						2	2	3	2	1
				716706.2	3				3						2	2	3	2	1
				716706.3	2	2			3						3	2	3	2	1
				716706.4	3	2	3	1	3						3	2	2	3	1
				716706.5	1	2	3	1	3						3	2	2	3	1
				716706	**2.4**	**2**	**3**	**1**	**3**							**2**	**2.6**	**2.4**	**1**
BE	VII	B.E. Electrical	PROJECT I	716707.1	3			3				3					3	3	3
				716707.2	3	3	3	3	2				3		2	3	3	3	3
				716707.3	3	3	3	3	3	2			3		3	3	3	3	3
				716707.4	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3
				716707.5	3	2	3		2	2	2						2	2	2

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				716707	**3**	**2.75**	**3**	**3**	**2.5**		**2.5**	**3**	**3**	**3**		**3**	**2.8**	**2.8**	**2.8**
BE	VIII	B.E. Electrical	Power System Protection	816801.1	3	-	-	-	2	-	-	-	-	---	-	2	3	2	2
				816801.2	3	-	-	-	2	-	-	-	-	-	-	2	3	2	2
				816801.3	3	2	-	-	-	-	-	-	-	-	-	2	3	3	2
				816801.4	3	2	2	2	2	-	-	-	-	-	-	2	3	2	2
				816801.5	3	-	-	-	2	-	-	-	-	-	-	2	3	2	2
				816801	**3**	**2**	**2**	**2**								**2**	**3**	**2.2**	**2**
BE	VIII	B.E. Electrical	Electric and HybridVhehical	816831.1	2	1	1	1								1	1		
				816831.2	2	2	2	1									1		
				816831.3	2	1	1										1		
				816831.4	2	1				2						1	1		
				816831.5	2	1	1			2						1			
				816831	**2**	**1.2**	**1.25**	**1**		**2**						**1**	**1**		
BE	VIII	B.E. Electrical	Digital Signal Processing	816841.1	3	3		3		2						3	3	2	
				816841.2	2		3									2		2	3
				816841.3	3	2	3	3									3	2	
				816841.4	2			2								3	3		3
				816841.5	1		2									2			1
				816841	**2.2**	**2.5**	**2.67**	**2.67**		**2**						**2.5**	**3**	**2**	**2.333**
BE	VIII	B.E. Electrical	Flexible AC Transmission System & Power Quality	816821.1	3	2		2								3	**3**	**2**	
				816821.2	3	2		2								2	**2**	**1**	

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
				816821.3	3											2	**2**		
				816821.4	3											3	**2**	**1**	
				816821.5	3			2	1							3	**2**		**1**
				816821	**3**	**2**		**2**	**1**							**2.6**	**2.2**	**1.333**	**1**
BE	VIII	B.E. Electrical	Power System Protection LAB	816805.1	3	-	-	2	2	-	-	-	-	-	-	2	3	2	2
				816805.2	3	2	2	2	2	-	-	-	-	-	-	2	3	3	2
				816805.3	3	2	2	2	2	-	-	-	-	-	-	2	3	3	2
				816805.4	3	2	2	2	2	-	-	-	-	-	-	2	3	3	2
				816805.5	3	2	2	2	2	-	-	-	-	-	-	2	3	3	2
				816805	**3**	**2**	**2**	**2**								**2**	**3**	**2.8**	**2**
BE	VIII	B.E. Electrical	High Voltage Lab	816806.1													2		
				816806.2						3		1				2	1	3	1
				816806.3						2				2		1		2	
				816806.4												1	1	2	
				816806.5										1		1			2
				816806						**2.5**		**1**		**1.5**		**1.25**	**1.333**	**2.333**	**1.5**
BE	VIII	B.E. Electrical	PROJECT II	816807.1	3	3	3	2	3	2	3		2		2	2	3	3	
				816807.2	3	3	3	2	3	2	3	2	2	2	2	2	3	3	3
				816807.3	3	3	3	2	3	2	3	2	2	2	2	2	3	3	3
				816807.4	3		3		3	2	2	2	2	3	2	2	3	3	2
				816807.5	3	2	2		2								3	3	
				816807	**3**	**2.75**	**2.8**	**2**	**2.8**		**2.75**	**2**	**2**	**2.333**		**2**	**3**	**3**	**2.667**

Attainment of Programme Outcomes and Course Outcomes for B.E. Electrical Engineering

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
FE	I	B.E. Electrical	Applied Physics-I	110101	2	2	2		2	2	2					2			
FE	I	B.E. Electrical	Applied Chemistry-I	110102	2.6	2.6	2.6	2.6	2.6	2.6	2.6					2.6			
FE	I	B.E. Electrical	Applied Mathematics-I	110103	2	2	2												
FE	I	B.E. Electrical	Communicative English	110104	2.6			2.6	2.6		2.6	2.6	2.6	2.6		2.6			
FE	I	B.E. Electrical	Introduction to Civil Engineering and Engineering Mechanics	110105	2	2	2												
FE	I	B.E. Electrical	Introduction to Electrical Engineering	110106	2	2	2	2								2			
FE	I	B.E. Electrical	Workshop Practice-I	110107	3	3	3	3	3				3		3				
FE	I	B.E. Electrical	Applied Science-I Lab (Applied Chemistry– I Lab)	110108	2	2	2	2		2	2					2			
FE	I	B.E. Electrical	Introduction to Civil Engineering & Engineering Mechanics Lab	110109	2.4	2.4	2.4	2.4											
FE	I	B.E. Electrical	Introduction to Electrical Engineering Lab.	110110	2	2	2	2											
FE	I	B.E. Electrical	Communicative English Lab	110111	2.6							2.6		2.6	2.6				

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
FE	II	B.E. Electrical	Applied Physics-II	210201	2	2	2		2	2	2					2			
FE	II	B.E. Electrical	Applied Chemistry-II	210202	2	2	2	2	2	2	2					2			
FE	II	B.E. Electrical	Applied Mathematics- II	210203	2.6	2.6	2.6		2.6		2.6								
FE	II	B.E. Electrical	Introduction to Computer Engineering and Programming	210204	2	2	2	2		2	2					2			
FE	II	B.E. Electrical	Introduction to Mechanical Engineering and Engineering Drawing	210205	2	2	2		2					2					
FE	II	B.E. Electrical	Introduction to Electronics Engineering	210206	2.6	2.6													
FE	II	B.E. Electrical	Workshop Practice-II	210207	2	2	2	2	2				2		2				
FE	II	B.E. Electrical	Applied Science-II Lab (Applied Chemistry-II Lab)	210208	2	2	2	2		2	2					2			
FE	II	B.E. Electrical	Introduction to Mechanical Engineering & Engineering Drawing Lab	210209	2	2	2		2					2					

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
FE	II	B.E. Electrical	Introduction to Computer Engineering and Programming Lab	210210	2	2	2	2		2	2					2			
FE	II	B.E. Electrical	Introduction to Electronics Engineering Lab	210211	1.6	1.6													
SE	III	B.E. Electrical	Engineering Mathematics- III	816301	2	2	2	2	2	2						2	2		
SE	III	B.E. Electrical	Numerical Techniques	316302	2	2	2	2	2	2						2	2	2	2
SE	III	B.E. Electrical	Electrical Circuit Analysis	816303	2	2	2	2	2	2						2	2	2	2
SE	III	B.E. Electrical	Electrical Machine -I	816304	2	2	2	2	2							2	2	2	2
SE	III	B.E. Electrical	Industrial Organization and Management	816305			2			2		2	2	2	2	2	2	2	2
SE	III	B.E. Electrical	Electrical Circuit analysis LAB	816306	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
SE	III	B.E. Electrical	Electrical Machine-I LAB	816307	3	3	3	3		3		3				3	3	3	3
SE	III	B.E. Electrical	Electrical Workshop LAB	816308	3	3	3	3	3			3	3		3	3	3	3	3
SE	IV	B.E. Electrical	Biology	816401	2	2	2	2	2	2	2	2	2			2		2	2

Class	Semester	Program	Name of the Subject	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
SE	IV	B.E. Electrical	Electrical Engineering Materials	816402	2	2		2		2	2			2		2	2	2	
SE	IV	B.E. Electrical	Analog and Digital Electronics	816403	2	2	2	2	2	2	2		2	2			2	2	2
SE	IV	B.E. Electrical	Electrical Machine-II	816404	2	2	2	2						2		2	2	2	2
SE	IV	B.E. Electrical	Entrepreneurship Development	816405							2	2	2	2	2	2	2	2	2
SE	IV	B.E. Electrical	Electrical Engineering Materials LAB	816406	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
SE	IV	B.E. Electrical	Analog and Digital Electronics LAB	816407	2	2	2	2	2	2	2	2	2	2			2	2	2
SE	IV	B.E. Electrical	Electrical Machine-II LAB	816408	2	2	2	2		2		2		2		2	2	2	2
SE	IV	B.E. Electrical	Mesurement and Instrumentation LAB	816409	2	2	2	2					2	2			2	2	2
TE	V	B.E. Electrical	Power Electronics	816501	2	2	2	2	2		2		2			2	2	2	2
TE	V	B.E. Electrical	Power System -I	516502	2.6	2.6	2.6	2.6								2.6	2.6	2.6	
TE	V	B.E. Electrical	Electromagnetic Field	516503	2.6	2.6	2.6	2.6	2.6				2.6			2.6	2.6	2.6	
TE	V	B.E. Electrical	Signals and Systems	516541	2	2	2	2	2							2	2	2	2

TE	V	B.E. Electrical	Electronics Mesurement	516552	2.6	2.6	2.6	2.6	2.6							2.6	2.6	2.6	2.6
Class	**Semester**	**Program**	**Name of the Subject**	**CO**	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
TE	V	B.E. Electrical	Power Electronics Lab	816506	2.6	2.6	2.6	2.6	2.6		2.6		2.6			2.6	2.6	2.6	2.6
TE	V	B.E. Electrical	Power System-I LAB	816507	2.6	2.6	2.6	2.6									2.6	2.6	
TE	V	B.E. Electrical	Electronic Design Lab	816508	2.6	2.6	2.6	2.6	2.6	2.6					2.6	2.6	2.6	2.6	2.6
TE	V	B.E. Electrical	MP-I	816509	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
TE	VI	B.E. Electrical	Control System	616601	2.6	2.6	2.6	2.6	2.6				2.6	2.6		2.6	2.6	2.6	2.6
TE	VI	B.E. Electrical	Microprocessor and Microcontroller	616602	2.2	2.2	2.2	2.2	2.2	2.2			2.2	2.2		2.2	2.2	2.2	2.2
TE	VI	B.E. Electrical	Power System-II	616603	2.2	2.2	2.2	2.2								2.2	2.2	2.2	
TE	VI	B.E. Electrical	Industrial Automation (PROF ELECT 2)	816641	2.6	2.6	2.6	2.6		2.6			2.6			2.6	2.6	2.6	2.6
TE	VI	B.E. Electrical	Linear Integrated Circuits and Applications	616652	2.6	2.6	2.6	2.6	2.6								2.6	2.6	2.6
TE	VI	B.E. Electrical	Control System LAB	816606	3	3		3								3	3	3	3
TE	VI	B.E. Electrical	Microprocessor and microcontroller LAB	816607	2.6	2.6		2.6	2.6		2.6			2.6			2.6	2.6	2.6
TE	VI	B.E.	Power System-II	816608	3	3		3								3	3	3	

		Electrical	LAB																
Class	**Semester**	**Program**	**Name of the Subject**	**CO**	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
TE	VI	B.E. Electrical	MINOR PROJECT	816609	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
BE	VII	B.E. Electrical	Electrical Drives	716701	3	3	3	3	3		3		3		3	3	3	3	3
BE	VII	B.E. Electrical	Electrical Energy Conservation and Auditing	716721	3	3	3	3	3							3	3	3	3
BE	VII	B.E. Electrical	Power System Dynamics and Control	716731	3	3	3	3	3	3			3				3	3	3
BE	VII	B.E. Electrical	VLSI Design and Technology	716741	3	3	3	3	3				3				3	3	3
BE	VII	B.E. Electrical	Electrical Drives LAB	716705	2.6	2.6	2.6	2.6	2.6			2.6	2.6			2.6	2.6	2.6	2.6
BE	VII	B.E. Electrical	MATLAB Application Lab	716706	3	3	3	3	3							3	3	3	3
BE	VII	B.E. Electrical	PROJECT I	716707	2.6	2.6	2.6	2.6	2.6		2.6	2.6	2.6	2.6		2.6	2.6	2.6	2.6
BE	VIII	B.E. Electrical	Power System Protection	816801	3	3	3	3								3	3	3	3
BE	VIII	B.E. Electrical	Electric and Hybrid Vhehical	816831	3	3	3	3		3						3	3		
BE	VIII	B.E. Electrical	Digital Signal Processing	816841	3	3	3	3		3						3	3	3	3

BE	VIII	B.E. Electrical	Flexible AC Transmission System & Power Quality	816821	3	3		3	3							3	3	3	3
Class	**Semester**	**Program**	**Name of the Subject**	**CO**	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**
BE	VIII	B.E. Electrical	Power System Protection LAB	816805	2	2	2	2								2	2	2	2
BE	VIII	B.E. Electrical	High Voltage Lab	816806						2		2		2		2	2	2	2
BE	VIII	B.E. Electrical	PROJECT II	816807	3	3	3	3	3		3	3	3	3		3	3	3	3
			Attainment		**2.382**	**2.376**	**2.350**	**2.424**	**2.410**	**2.221**	**2.240**	**2.341**	**2.415**	**2.209**	**2.383**	**2.380**	**2.458**	**2.447**	**2.450**