

Sardar Patel College of Engineering Andheri (West), Mumbai 400 058

**ELECTRICAL ENGINEERING**

**T.Y.BTech. in Electrical Engineering**

**Credit System**

**Year 2018-2019**

**Sardar Patel College of Engineering Andheri (West), Mumbai 400 058**  
**Credit System for Third Year B.Tech. in Electrical Engineering (Semester V)**  
**Academic Year 2018-19**

Sr. No	Course Name	Code	Course Plan per Week (Hrs)			Credits	In semester Evaluation (Points)		End Semester Evaluation (Points)		End semester weightage (%)	Term work/ Practical	Total Points
			L	P	T		T-I	T-II	Points	Time (Hrs)			
<b>Theory Courses</b>													
1	Electromagnetic Fields and Waves	PC-BTE501	3	0	1	4	20	20	100	3	60	25	125
2	Control System	PC-BTE502	3	0	0	3	20	20	100	3	60	-	100
3	Electrical Machines II	PC-BTE503	3	0	0	3	20	20	100	3	60	--	100
4	Power System I	PC-BTE504	3	0	1	4	20	20	100	3	60	25	125
5	Power Electronics	PC-BTE505	3	0	0	3	20	20	100	3	60	--	100
<b>Laboratory Courses</b>													
6	Control System Laboratory	PC-BTE506	0	2	0	1	-	-	-	-	-	25	25
7	Electrical Machines II Laboratory	PC-BTE507	0	2	0	1	-	-	-	-	-	25	25
8	Power Electronics Laboratory	PC-BTE508	0	2	0	1						25	25
<b>Professional Elective</b>													
9	PE1	PE-BTE501 PE-BTE502	3	0	1	4	20	20	100	3	60	25	125
<b>Value Added Courses</b>													
10	Soft Computing I I Introduction to MATLAB/SCILAB	VL-BTE01	0	2	0	0	20	20	100	3	60	-	100
11	Introduction to Python	VL-BTE02	0	2	0	0	20	20	100	3	60	-	100
12	Finite Element Methods for Electrical Engineering	VL-BTE05	0	2	0	0	20	20	100	3	60	--	100
<b>Online Courses</b>													
13	Online Course 1	OL-BTE501	-	-	-	0	-	-	-	-	-	-	-
<b>TOTAL</b>			<b>18</b>	<b>6</b>	<b>3</b>	<b>24</b>							<b>750</b>

L: Lecture P: Practical T: Tutorial

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Professional Electives (PE I): PE-BTE501: Digital Signal Processing  
PE-BTE502: Computer Architecture

- Note:
- (1) Refer (i) Academic rules and regulations and (ii) Examination rules and regulations for further details
  - (2) Laboratory course is considered as a separate head of passing.
  - (3) Assessment criteria for laboratory/Tutorial work. i.e. weightage for assessment shall be as follows:
    - i) Attendance in Laboratory/Tutorial = 20%, (ii) Journal= 40%, (iii) Practical Examination/ Mini project/ Quiz/ Seminar/ Oral = 40%.
  - (4) Student can opt for a online course available on <https://swayam.gov.in/> or <https://onlinecourses.nptel.ac.in/> and inform department by filling up registration form. After successful completion of the course and approval from the department UG committee, the course title can appear on the grade card of student.
  - (5) Department will offer the Value Added courses in a semester subject to availability of resources and enrollment of minimum 20 students opting for the course. Upon successful completion of the Value Added course, the grade of the course will appear in the grade card of the student. (\* additional contact hours and points will depend upon number of value added offered in a particular semester).

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**Credit System for Third Year B.Tech. in Electrical Engineering (Semester VI)  
Academic Year 2018-19**

Sr. No.	Course Name	Code	Course Plan per Week (Hrs)			Credits	In semester Evaluation (Points)		End Semester Evaluation (Points)		End semester weightage (%)	Term work/ Practical	Total Points
			L	P	T		T-I	T-II	Points	Time (Hrs)			
Theory Courses													
1	Power System II	PC-BTE601	3	-	1	4	20	20	100	3	60	25	125
2	Switchgear and Protection	PC-BTE602	3			3	20	20	100	3	60	--	100
Laboratory Courses													
3	Switchgear and Protection Laboratory	PC-BTE603	-	2	-	1	-	-	-	-	-	25	25
Professional Elective													
4	PE2	PE-BTE601 PE-BTE602	3	-	1	4	20	20	100	3	60	25	125
Open Electives													
5	OE1	OE-BTE601 -604	3	-	-	3	20	20	100	3	60	-	100
6	OE2	OE-BTE601 -604	3	-	--	3	20	20	100	3	60	--	100
Value Added Courses													
7	PLC	VL-BTE03	1	2	--	0	20	20	100	3	60		100
8	Soft Computing II ETAP and WAMS	VL-BTE06	1	2	--	0	20	20	100	3	60	-	100
Online Courses													
9	Online Course 1	OL-BTE601	-	-	-	0	-	-	-	-	-	-	-
Mandatory Course													
10	Environmental Science	MC- BT003	3	0	0	0	20	20	100	3	60	--	100
<b>TOTAL</b>			<b>18</b>	<b>2</b>	<b>2</b>	<b>18</b>							<b>575</b>

L: Lecture P: Practical T: Tutorial

Professional Electives: PE-BTE601: Electrical Machine Design

PE-BTE602: Control Systems Design

Open Electives: OE-BTE601: Project Management  
OE-BTE603: Communication Engineering

OE-BTE602: Artificial Intelligence  
OE-BTE604: VLSI circuits

- Note: (1) Refer (i) Academic rules and regulations and (ii) Examination rules and regulations for further details
- (2) Laboratory course is considered as a separate head of passing.
- (3) Assessment criteria for laboratory/Tutorial work. i.e. weightage for assessment shall be as follows:  
i) Attendance in Laboratory/Tutorial = 20%, (ii) Journal= 40%, (iii) Practical Examination/ Mini project/ Quiz/ Seminar/ Oral = 40%.
- (4) Student can opt for a online course available on <https://swayam.gov.in/> or <https://onlinecourses.nptel.ac.in/> and inform department by filling up registration form. After successful completion of the course and approval from the department UG committee, the course title can appear on the grade card of student.
- (5) The Mandatory courses are with Pass (P) and No Pass (NP) grades.
- (6) Department will offer the Value Added courses in a semester subject to availability of resources and enrollment of minimum 20 students opting for the course. Upon successful completion of the Value Added course, the grade of the course will appear in the grade card of the student. (\* additional contact hours and points will depend upon number of value added offered in a particular semester).