

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

**ELECTRICAL ENGINEERING**

**B. Tech. in Electrical Engineering**

**Credit System**

**Year 2018-2019**

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

**Credit System for B.Tech. in Electrical Engineering (Semester VII)  
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	Electric Drives	PC-BTE701	3	0	0	3	20	20	100	3	60	--	100
Laboratory Course													
2	Electric Drives Laboratory	PC-BTE702	0	2	0	1	--	--	--	--	--	25	25
Professional Electives													
3	PE 3	PE-BTE701-706	3	0	1	4	20	20	100	3	60	25	125
4	PE 4	PE-BTE701-706	3	0	1	4	20	20	100	3	60	25	125
Open Electives													
5	OE3	OE-BTE701-705	3	0	0	3	20	20	100	3	60	--	100
6	OE4	OE-BTE701-705	3	0	0	3	20	20	100	3	60	-	100
Project													
7	Project Stage I	PR-BTE701	0	(2+8) <sup>\$</sup>	-0	5						50**##	50
Value Added Courses													
8	Soft Computing I 1 Introduction to MATLAB/SCILAB	VL-BTE01	0	2	0	0	20	20	100	3	60	-	100
9	Introduction to Python	VL-BTE02	0	2	0	0	20	20	100	3	60	--	100
Online Courses													
10	Online Course 1	.OL-BTE701				0	-	-	-	-	-	-	-
<b>TOTAL</b>			<b>15</b>	<b>12</b>	<b>2</b>	<b>23</b>							<b>625</b>

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**Professional Electives:**

- PE-BTE701: Wind and Solar Energy Systems
- PE-BTE702: Industrial Electrical Systems
- PE- BTE703: Design Management and Auditing of Electrical Systems
- PE- BTE704: High Voltage Engineering.
- PE- BTE705: Digital Control Design
- PE- BTE706: Power Electronics Applications in Power System

**Open Electives:**

- OE-BTE701: Image Processing
- OE-BTE702: Computer Network
- OE-BTE703: Electrical Engineering Materials
- OE-BTE704: Embedded System
- OE-BTE705: Internet of Things

- 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
  - (6) For Project course: \$ contact hours = 2 and self-learning hours =8. For project course, in-semester evaluation shall include one or more in-semester presentation. ## Report, \*\* Presentation and Viva Voce, \*\* Examined by supervisor and one internal examiner

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**Credit System for B.Tech. in Electrical Engineering (Semester VIII)  
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 (Hr)			
Theory Courses													
1	Engineering Economics	HS-BTE801	3	0	0	3	20	20	100	3	60	--	100
Laboratory Courses													
2	Electronic Design Laboratory	PC-BTE801	1	2	0	2	--	--	--	--	-	50	50
Professional Electives													
3	PE 5	PE-BTE801-806	3	0	1	4	20	20	100	3	60	25	125
4	PE6	PE-BTE801-806	3	0	1	4	20	20	100	3	60	25	125
Open Elective													
5	OE5	OE-BTE801-802	3	0	0	3	20	20	100	3	60	-	100
Project													
6	Project Stage II	PR-BTE801	0	(2+10) <sup>\$</sup>	0	6						100 <sup>##**</sup>	<b>100</b>
Value Added													
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	OI-BTE801	-	-	-	0	-	-	-	-	-	-	-
<b>TOTAL</b>			<b>13</b>	<b>14</b>	<b>2</b>	<b>22</b>							<b>600</b>

L: Lecture P: Practical T: Tutorial

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**Professional Electives:**

PE-BTE801: Power System Dynamics and Control  
PE-BTE802: Smart Grid  
PE-BTE803: HVDC Transmission System  
PE-BTE804: Power Quality and FACTS  
PE-BTE805: Advanced Electric Drives  
PE-BTE806: Industrial Automation

**Open Electives:**

OE-BTE801: Robotics  
OE-BTE802: Power Plant Engineering

- Notes:
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  - (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 an 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).
  - (6) For Project course: \$ contact hours = 2 and self-learning hours =8. For project course, in-semester evaluation shall include one or more in-semester presentation. ## Report, \*\* Presentation and Viva Voce, \*\* Examined by supervisor and one internal examiner