

1.1.3 & 1.2.1

**Supporting Documents - Electrical
Engineering**

List of Courses Introduced



I. K. Gujral Punjab Technical University, Main Campus, Kapurthala
DEPARTMENT OF ELECTRICAL ENGINEERING

New Courses (125)

S. No.	Name of New Course	Course Code	Year of Introduction
1.	Optics and Modern Physics	BTPH102-18	2018
2.	Optics and Modern Physics Lab	BTPH112-18	2018
3.	Mathematics-I (Calculus & Linear Algebra)	BTAM101-18	2018
4.	Basic Electrical Engineering	BTEE101-18	2018
5.	Basic Electrical Engineering (Lab)	BTEE102-18	2018
6.	Engineering Graphics & Design	BTME101-18	2018
7.	Mentoring and Professional Development	BMPD101-18	2018
8.	Chemistry-I	BTCH101-18	2018
9.	Chemistry-I (Lab)	BTCH102-18	2018
10.	Mathematics-II (Differential Equations & Numerical Methods)	BTAM202-18	2018
11.	Programming for Problem Solving	BTPS101-18	2018
12.	Programming for Problem Solving (Lab)	BTPS102-18	2018
13.	Workshop / Manufacturing Practices	BTMP101-18	2018
14.	English	BTHU101-18	2018
15.	English (Lab)	BTHU102-18	2018
16.	Mentoring and Professional Development	BMPD201-18	2018
17.	Electrical Circuit Analysis	BTEE- 301-18	2019
18.	Analog Electronics	BTEE- 302-18	2019
19.	Electrical Machines – I	BTEE- 303-18	2019
20.	Electromagnetic Fields	BTEE- 304-18	2019
21.	Engineering Mechanics	BTEE- 305-18	2019
22.	Analog Electronics Laboratory	BTEE- 311-18	2019
23.	Electrical Machines – I Laboratory	BTEE- 312-18	2019
24.	Mandatory Course (BTMC-101-18)	BTMC-XXX-18	2019
25.	Mentoring and Professional Development of Students	BMPD-301-18	2019
26.	Institutional Summer Vacation Training	BTEE-321-18	2019
27.	Digital Electronics	BTEE- 401-18	2019
28.	Electrical Machines – II	BTEE- 402-18	2019
29.	Power Electronics	BTEE- 403-18	2019
30.	Signals and Systems	BTEE- 404-18	2019
31.	Mathematics-III (Probability & Statistics)	BTAM-302-18	2019
32.	Measurements and Instrumentation Lab	BTEE- 411-18	2019
33.	Digital Electronics Laboratory	BTEE- 412-18	2019
34.	Electrical Machines – II Laboratory	BTEE- 413-18	2019
35.	Power Electronics Laboratory	BTEE- 414-18	2019
36.	Mandatory Course (BTMC 102-18)	BTMC-XXX-18	2019
37.	Mentoring and Professional Development of Students	BMPD-401-18	2019
38.	Power Systems – I (Apparatus & Modelling)	BTEE- 501-18	2020
39.	Control Systems	BTEE- 502-18	2020
40.	Microprocessors	BTEE- 503-18	2020
41.	Electrical Engineering Materials	BTEE-504 A-18	2018
42.	Switchgear and Protection	BTEE-504 B-18	2018
43.	Electrical Machine Design	BTEE-504 C-18	2018
44.	Renewable Energy Sources	BTEE-504 D-18	2018


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S. No.	Name of New Course	Course Code	Year of Introduction
45.	Electromagnetic Waves	EVS-101-18	2020
46.	Power Systems-I Laboratory	BTEE- 511-18	2020
47.	Control Systems Laboratory	BTEE- 512-18	2020
48.	Microprocessors Laboratory	BTEE- 513-18	2020
49.	Summer Industry Internship	BTEE- 521-18	2020
50.	Mentoring and Professional Development of Students	BMPD-501-18	2020
51.	Power System-II (Opertaion & Control)	BTEE-601-18	2018
52.	Power Generation & Economics	BTEE-602-18	2018
53.	Electromagnetic Waves	BTEE-603-A-18	2018
54.	Power System Dynamics and Control	BTEE-603-B-18	2018
55.	Electrical Drives	BTEE-603-C-18	2018
56.	Wind and Solar Energy Systems	BTEE-603-D-18	2018
57.	High Voltage Engineering	BTEE-604-A-18	2018
58.	Power System Reliability	BTEE-604-B-18	2018
59.	Line-Commutated and Active PWM Rectifiers	BTEE-604-C-18	2018
60.	Energy Efficient Systems	BTEE-604-D-18	2018
61.	Electric Machines	OEE-201-18	2019
62.	Industrial Electrical Systems	OEE-202-18	2020
63.	Wind and Solar Energy Systems	OEE-203-18	2021
64.	Power Systems	OEE-204-18	2022
65.	Education, Technology and Society	HSMC103-18	2018
66.	History of Science and Technology in India	HSMC104-18	2018
67.	Values and Ethics	HSMC113-18	2018
68.	Introduction to Women's and Gender Studies	HSMC118-18	2018
69.	Human Relations at Work	HSMC123-18	2018
70.	Sanskrit Bhasa	HSMC124-18	2018
71.	Law and Engineering	HSMC (MME-303)	2018
72.	Electronic Designe Lab	BTEE-611-18	2018
73.	Power System-II Lab	BTEE-612-18	2018
74.	Project-I	BTEE-621-18	2018
75.	Mentoring and Professional Development of Students	BMPD-601-18	2018
76.	Power System Analysis	EEPS-101-18	2018
77.	Power System Dynamics-I	EEPS-102-18	2018
78.	Research Methodology and IPR	MTRM- 101-18	2018
79.	Power System Steady State Analysis Lab	EEPS- 105-18	2018
80.	Renewable Energy System	EEPS-103A-18	2018
81.	Smart Grids	EEPS-103B-18	2018
82.	High Power Converters	EEPS-103C-18	2018
83.	Wind and Solar Systems	EEPS-103D-18	2018
84.	Electrical Power Distribution System	EEPS-104A-18	2018
85.	Mathematical Methods for Power Engineering	EEPS-104B-18	2018
86.	Pulse Width Modulation for PE Converters	EEPS-104C-18	2018
87.	Electric and Hybrid Vehicles	EEPS-104D-18	2018
88.	Power System Dynamics lab	EEPS-106A-18	2018
89.	Renewable Energy Lab	EEPS-106B-18	2018
90.	English for Research Paper Writing	MTA-101-18	2018
91.	Disaster Management	MTA-102-18	2018
92.	Sanskrit for Technical Knowledge	MTA-103-18	2018

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S. No.	Name of New Course	Course Code	Year of Introduction
93.	Value Education	MTA-104-18	2018
94.	Digital Protection of Power System	EEPS- 201-18	2018
95.	Power System Dynamics-II	EEPS-202-18	2018
96.	Mini Project	MTPR-101-18	2018
97.	Restructured Power Systems	EEPS-203A- 18	2018
98.	Advanced Digital Signal Processing	EEPS-203B- 18	2018
99.	Dynamics of Electrical Machines	EEPS-203C- 18	2018
100.	Power Apparatus Design	EEPS-203D- 18	2018
101.	Advanced Micro- Controller Based Systems	EEPS-204A- 18	2018
102.	SCADA Systems and Applications	EEPS-204B- 18	2018
103.	Power Quality	EEPS-204C- 18	2018
104.	AI Techniques	EEPS-204D-18	2018
105.	Power System Protection Lab	EEPS-205A- 18	2018
106.	Power Quality Lab	EEPS-205B- 18	2018
107.	Artificial Intelligence Lab	EEPS-206A- 18	2018
108.	Power Electronics Applications to Power Systems Lab	EEPS-206B- 18	2018
109.	Smart Grids Lab	EEPS-206C- 18	2018
110.	Constitution of India	MTA-105- 18	2018
111.	Pedagogy Studies	MTA-106- 18	2018
112.	Stress Management by Yoga	MTA-107- 18	2018
113.	Personality Development through Life Enlightenment Skills	MTA-108- 18	2018
114.	Phase-I Dissertation	EEPS-302-18	2018
115.	Power System Transients	EEPS-301A-18	2018
116.	FACTS and Custom Power Devices	EEPS-301B-18	2018
117.	Industrial Load Modeling and Control	EEPS-301C-18	2018
118.	Dynamics of Linear Systems	EEPS-301D-18	2018
119.	Business analytics	MTOE-301A-18	2018
120.	Industrial Safety	MTOE-301B-18	2018
121.	Operations Research	MTOE-301C-18	2018
122.	Cost Management of Engineering Projects	MTOE-301D-18	2018
123.	Composite Materials	MTOE-301E-18	2018
124.	Waste to Energy	MTOE-301F-18	2018
125.	Phase-II Dissertation	EEPS- 401-18	2018


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