

**JIS COLLEGE OF ENGINEERING  
DEPARTMENT OF ELECTRICAL ENGINEERING  
CURRICULUM (UG B.TECH COURSE)  
BATCH – 2017 PASSOUT**

**I<sup>ST</sup> SEMESTER**

Sl. No	Code	Paper	Contact Periods / week				Total Contact Hours	Credit	Full Marks
			L	T	P	S			
BS	M101	Mathematics – I	3	1	-	-	4	4	100
BS	CH(EE&ECE)101	Engineering Chemistry	3	1	-	-	4	4	100
ES	EE 101	Basic Electrical Engineering	3	1	-	-	4	3	100
HS	HU101	Professional Communication	3	1	-	-	4	3	100
ES	ME101	Engineering Mechanics	3	1	-	-	4	3	100
BS	CH191	Chemistry Practical	-	-	3	-	3	2	100
ES	EE 191	Basic Electrical Engineering lab	-	-	3	-	3	2	100
ES	ME191	Engineering Graphics	1	-	-	3	4	2	100
HS	XC181	Extracurricular activities (NSS)- Sessional	-	-	-	2	2	-	50
HS	HU181	Language Laboratory Practice	-	-	-	2	2	1	50
Total (Theory)							21	17	500
Total( Practical +Sessional)							13	7	400
GRAND TOTAL (THEORY+PRACTICAL+SESSIONAL)							34	24	900

**2<sup>ND</sup> SEMESTER**

Sl. No	Code	Paper	Contact Periods/ week				Total Contact Hours	Credit	Full Marks
			L	T	P	S			
BS	M 201	Mathematics - II	3	1	-	-	4	4	100
BS	PH 201	Physics - I	3	1	-	-	4	4	100
ES	ES(EC)201	Elements of Electronics Engineering	3	1	-	-	4	3	100
ES	CS(EE) 201	Computer Fundamentals & Principle of Computer Programming	3	1	-	-	4	3	100
ES	ME(EE)201	Engineering Thermodynamics & Fluid Mechanics	3	1	-	-	4	3	100
BS	PH 291	Physics - I Lab.	-	-	3	-	3	2	100
ES	CS(EE)291	Computer Programming Lab.	-	-	3	-	3	2	100
ES	ES(EC)291	Elements of Electronics Engineering lab	-	-	3	-	3	2	100
ES	ME 293	Workshop Practice	1	-	-	3	4	2	100
Total(Theory)							21	17	500
Total(Practical +Sessional)							12	8	400
GRAND TOTAL (THEORY+PRACTICAL+SESSIONAL)							33	25	900

### 3<sup>RD</sup> SEMESTER

Sl. No.	Code	Paper	Contact Periods/ week				Total Contact Hours	Credit	Full Marks
			L	T	P	S			
BS	M (EE)301	Mathematics - III	3	1	-	-	4	4	100
BS	CS(EE)301	Numerical Methods and Computer Programming	3	1	-	-	4	3	100
PC	EC(EE)301	Analog Electronic Circuits	3	-	-	-	3	3	100
ES	ME(EE)301	Thermal Power Engineering	3	-	-	-	3	3	100
PC	EE301	Circuits Theory And Networks	3	1	-	-	4	3	100
PC	EE302	Electrical and Electronics Measurement	3	1	-	-	4	4	100
BS	CS(EE)391	Numerical Methods And Computer Programming Lab	-	-	3	-	3	2	100
PC	EC(EE)391	Analog Electronics Laboratory	-	-	3	-	3	2	50
ES	ME(EE)391	Thermal Power Engineering Laboratory	-	-	-	-	-	-	50
ES	EE391	Circuit Theory and Network Laboratory	-	-	3	-	3	2	100
ES	EE 392	Electrical and Electronics Measurements Laboratory	-	-	3	-	3	2	100
Total Theory							22	20	600
Total Practical							12	8	400
GRAND TOTAL							34	28	1000

**Note:** Analog Electronics Lab [EC(EE)391], & Thermal Power Engineering Lab [ME(EE)391] together, will be treated as one lab.

### 4<sup>TH</sup> SEMESTER

Sl. No.	Code	Paper	Contact Periods/ week			Total Contact Hours	Credit	Full Marks	
			L	T	P				
BS	PH(EE) 401	Physics - II	3	1	-	4	4	100	
PC	EC(EE)401	Digital Electronics	3	-	-	3	3	100	
BS	CH401	Environment & Ecology	2	-	-	2	2	50	
PC	EE 401	Electrical Machines I	3	1	-	4	4	100	
PC	EE 402	Field Theory & Network	4	-	-	4	4	100	
PC	EE 403	Signal and Systems	3	1	-	4	4	100	
PC	EE491	Electrical machine I lab	-	-	3	3	2	100	
PC	EE 493	Signal & Systems lab	-	-	3	3	2	100	
PC	EC(EE)491	Digital Electronics lab	-	-	3	3	2	50	
BS	PH(EE) 491	Physics Lab	-	-	-	-	-	-	
HS	HU(EE)481	Technical Report Writing & Language Lab Practice	-	-	-	-	-	-	
Total Theory									
Total Practical									
TOTAL									

(for the students who were admitted in Academic Session 2014-2015)

### 5<sup>TH</sup> SEMESTER

Sl. No.	Code	Paper	Contact Periods Per Weeks				Total Contact Hours	Credit	Full Marks
			L	T	P	S			
HS	HU(EE)501	Financial & Industrial management	3	0	0	0	3	2	100
PC	EE501	Electrical Machines II	3	1	0	0	4	4	100
PC	EE502	Power Systems I	3	1	0	0	4	4	100
PC	EE503	Control System I	3	1	0	0	4	4	100
PC	EE504	Power Electronics	3	0	0	0	3	3	100
PC	EE591	Electrical Machines II Lab	0	0	3	0	3	2	100
PC	EE592	Power Systems I Lab	0	0	3	0	3	2	100
PC	EE593	Control System I Lab	0	0	3	0	3	2	100
PC	EE594	Power Electronics lab	0	0	3	0	3	2	100
PC	EE581	Electrical Machine Design I	1	0	0	3	4	2	100
Total theory							19	17	500
Total Practical & Sessional							15	10	500
<b>TOTAL</b>							<b>34</b>	<b>27</b>	<b>1000</b>

### 6<sup>TH</sup> SEMESTER

Sl. No.	Code	Paper	Contact Periods Per Weeks				Total Contact Hours	Credit	Full Marks
			L	T	P	S			
PE	EE 601	Elective I a. Digital Signal Processor b. Digital Communication c. Cloud Computing	2	1	0	0	3	2	100
PC	EE603	Control System - II	2	1	0	0	3	3	100
PC	EE602	Power Systems-II	2	1	0	0	3	3	100
PC	EE604	Microprocessor & Microcontrollers	2	1	0	0	3	3	100
IE	CS(EE)604C	<b>Elective II</b> a. Object oriented Programming b. Computer architecture and operating systems c. Software Engineering	3	1	0	0	4	2	100
PC	EE692	Power Systems-II Lab	0	0	3	0	3	2	100
PC	EE693	Control System – II Lab	0	0	3	0	3	2	100
PC	EE694	Microprocessor & Microcontrollers Lab	0	0	3	0	3	2	100
PC	EE 681	Electrical Machine Design –II	1	0	-	3	4	2	100
PC	EE671	Industry Visit and/or Survey Camp	0	0	0	0	0	0	50
PC	EE682	Group Discussion & Seminar	0	0	0	3	3	2	50
Total Theory							21	18	600
Total Practical/ Sessional							15	10	500
<b>TOTAL</b>							<b>36</b>	<b>28</b>	<b>1100</b>
#15 days training									

## 7<sup>TH</sup> SEMESTER

Sl. No	Code	Paper	Contact Periods Per Weeks				Total Contact Hours	Credit	Full Marks
			L	T	P	S			
PC	EE 701	Electric Drives	3	0	0	0	3	3	100
PE	EE 702	Elective III a. Utilization of Electric Power b. Advanced Power Electronics c. Illumination Engineering	3	0	0	0	3	3	100
PE	EE 703	Renewable & Non Conventional Energy	3	0	0	0	3	3	100
PE	EE704A	Elective-IV a. Advanced Power Systems b. Power generation and economics c. High Voltage engineering d. Advanced Electrical Measurement & Instrumentation	3	0	0	0	3	3	100
OE	CS(EE)701A	Elective V a. Data Base Management System b. Artificial intelligence and soft computing c. Digital Image Processing d. Computer Networking	3	1	0	0	3	2	100
PC	EE791	Electric Drives lab	0	0	3	0	3	2	100
OE	CS(EE)791	Elective - III lab	0	0	3	0	3	2	100
PC	EE781	Project Preliminary	0	0	3	0	6	2	50
PC	EE771	Industrial Training and Report	0	0	0	0	0	1	50
Total Theory							15	14	500
Total Practical							12	07	300
<b>TOTAL</b>							<b>27</b>	<b>21</b>	<b>800</b>
# 30 days training report									

## 8<sup>TH</sup> SEMESTER

Sl. No.	Code	Paper	Contact Periods Per Weeks				Total Contact Hours	Credit	Full Marks
			L	T	P	S			
HS	HU801	Organizational Behavior	2	0	0	0	2	2	100
PE	EE 801B	Elective IV a. HVDC Transmission b. Energy Management and Audit c. Power Plant Engineering	3	0	0	0	3	3	100
PE	EE802A	Elective V a. Sensors & Transducers b. Process control and instrumentation c. Electronic Instrumentation & Control.	3	0	0	0	3	3	100
PC	EE881	Project & Thesis	0	0	0	12	12	4	100
PE	EE871	Grand Viva	0	0	0	0	0	3	100
Total Theory							08	08	300
Total Practical							12	07	200
<b>TOTAL</b>							<b>20</b>	<b>15</b>	<b>500</b>