Course Structure

B Tech in Electrical & Electronics Engineering, 2020-24

I Semester- Physics Cycle							
Sl.No	**Type**	**Course Name**	**L (Hrs)**	**T (Hrs**	**P (Hrs)**	**Hrs/ Week**	**Credits**
1	MA131	Mathematics –I	3	0	2	5	4
2	PH132P	Physics	3	0	0	3	3
3	EE133P	Basic Electrical Engineering	3	0	2	5	4
4	CE134P	Basics of Civil Engineering & Engineering Mechanics	3	0	2	5	4
5	EG135P	Engineering Graphics	1	0	4	3	3
6	BS136	Bioscience	2	0	0	2	2
7	HE171	Holistic Education-I	1	0	0	1	1
		Total	**16**	**0**	**10**	**24**	**21**

II Semester- Chemistry Cycle							
Sl.No	**Type**	**Course Name**	**L (Hrs)**	**T (Hrs**	**P (Hrs)**	**Hrs/ Week**	**Credits**
1	MA231	Mathematics –II	3	0	0	3	3
2	CH232P	Chemistry-I	3	0	2	5	4
3	EC233P	Basic Electronics	3	0	2	5	4
4	CS234P	Computer programming	3	0	2	5	4
5	ME235	EME/Workshop practice	1	0	4	3	3
6	TE236P	Technical Communication	1	0	2	3	2
7	ME 251	Workshop Practice Lab	0	0	1	2	1
8	HE271	Holistic Education-II	1	0	0	1	1
		Total	**15**	**0**	**13**	**27**	**22**

III Semester							
Sl.No	**Type**	**Course Name**	**L (Hrs)**	**T (Hrs**	**P (Hrs)**	**Hrs/ Week**	**Credits**
1	MA331	Mathematics-III	3	0	0	3	3
2	EE332P	Electrical Machines -I	3	0	2	5	4
3	EE333P	Analog & Digital Electronics	3	0	2	5	4
4	EE 334	Electrical Circuit Analysis	3	0	0	3	3
5	EE335	Electromagnetic Fields	3	0	0	3	3
6	HS336	Technical Communication	2	0	0	2	2
7	EEMC1	Cyber Security	2	0	0	2	0
8	EEMC2	Constitution of India	1	0	0	1	0
9	HE371	Holistic Education-III	1	0	0	1	1
		Total	**21**	**0**	**4**	**25**	**20**

IV Semester							
Sl.No	**Type**	**Course Name**	**L (Hrs)**	**T (Hrs**	**P (Hrs)**	**Hrs/ Week**	**Credits**
1	EE431P	Electrical Machines- II	3	0	2	5	4
2	EE432P	Control Systems	3	0	2	5	4
3	EE433	Signals and Systems	3	0	0	3	3
4	EE434	Generation and Transmission	3	0	0	3	3
5	HS435	Professional Ethics	3	0	0	3	3
6	EE436	Biology for Engineers Lab	0	0	2	2	1
7	EEMC3	Environmental Science	2	0	0	2	0
8	HE471	Holistic Education-IV	0	0	2	1	1
		Total	**17**	**0**	**8**	**24**	**19**

V Semester							
Sl.No	Type	Course Name	L (Hrs)	T (Hrs	P (Hrs)	Hrs/ Week	Credits
1	EE531P	Power Electronics	3	0	2	5	4
2	EE532P	Microprocessors and Microcontrollers	3	0	2	5	4
3	EE533	Power Systems - I	3	0	0	3	3
5	EE534	Advanced Computer programming	3	0	0	3	3
6	EE535X	Program Elective – 1	3	0	0	3	3
7	OE01	Open Elective - 1	3	0	0	3	3
		Total	**18**	**0**	**4**	**22**	**20**

VI Semester							
Sl.No	**Type**	**Course Name**	**L (Hrs)**	**T (Hrs**	**P (Hrs)**	**Hrs/ Week**	**Credits**
1	EE631P	High Voltage Engineering and Protection	3	0	2	5	4
2	EE632P	Power Systems - II	3	0	2	5	4
3	EE633P	Digital Signal Processing	3	0	0	3	3
4	EE634	Project Management & Finance	3	0	0	3	3
5	OE02	Open Elective - 2	3	0	0	3	3
6	OE03	Open Elective - 3 (Global Elective)	3	0	0	3	3
		Total	**18**	**0**	**4**	**22**	**20**

VII Semester							
Sl.No	**Type**	**Course Name**	**L (Hrs)**	**T (Hrs**	**P (Hrs)**	**Hrs/ Week**	**Credits**
1	EE731X	Program Elective – 2	3	0	0	3	3
2	EE732X	Program Elective – 3	3	0	0	3	3
3	EE733X	Program Elective – 4	3	0	0	3	3
4	OE04	Open Elective - 4	3	0	0	3	3
6	EE771	Project Stage-I	0	0	6	6	3
7	EE772	Service Learning	0	0	4	4	2
8	EE773	Internship	0	0	4	2	2
		Total	**12**	**0**	**14**	**24**	**19**

VIII Semester							
Sl.No	**Type**	**Course Name**	**L (Hrs)**	**T (Hrs**	**P (Hrs)**	**Hrs/ Week**	**Credits**
1	EE831X	Program Elective –5	3	0	0	3	3
2	EE833X	Program Elective –7	3	0	0	3	3
3	EE871	Project Stage-II	0	0	16	16	8
		Total	**6**	**0**	**16**	**22**	**14**

V Semester Electives	
A	Wind and Solar Energy Systems
B	Electrical Machine Design
C	Power System Protection
D	Internet of Things
E	Utilization of Electrical Energy
F	Object Oriented Programming

VII Semester Electives	
A	Industrial Drives
B	Electrical and Hybrid Vehicles
C	Power System Dynamics and Control
D	Digital Control Systems
E	Control Systems Design
F	Electric Mobility
G	Advanced Converter Design
H	Programmable Logic Controllers
I	Mobile Communication Networks
J	Digital Communication
K	Wireless Sensor Networks

VIII Semester Electives	
A	HVDC Transmission Systems
B	Power Quality and FACTS
C	Electrical Energy Conservation and Auditing
D	Computer Architecture
E	Energy Storage systems
F	Special Electrical Machines
G	Embedded Control Systems
H	Robotics and Automation
I	Computer Communication Networks
J	Optical Fiber Communication