

DEPARTMENT OF ELECTRICAL ENGINEERING
M.M.M. UNIVERSITY OF TECHNOLOGY
GORAKHPUR

Semester wise Credit Structure for B. Tech. (Electrical Engineering)

Category Semesters	I	II	III	IV	V	VI	VII	VIII	Total
Basic Sciences & Maths (BSM)	4	8	4	4	-	-	-	-	20
Engineering Fundamentals (EF)	7	7	4	-	-	-	-	-	18
Professional Skill (PS)	2	2	-	-	-	-	-	-	4
Program Core (PC)	-	-	9	18	14	14	12	-	67
Management (M)	-	-	-	-	2	2	-	-	4
Humanities & Social Science (HSS)	-	2	2	-	-	-	-	-	4
Humanities & Social Science Elective (HSSE)	2	-	-	-	-	-	-	-	2
Project (P)	-	-	-	-	-	2	3	0/4	5/9
Seminar (S)	-	-	-	-	-	2	-	-	2
Industrial Practice (IP)/ Industrial Elective (IE)#	-	-	-	-	-	-	-	12/8	12/8
Program link basic science and engineering courses (PLBSE) (To be decided by the department)	4	4	2	2	4	-	-	-	16
Program Electives (PE)	-	-	-	-	4	4	4	-	12
Open Electives (OE) (Other Departments)	-	-	-	-	-	-	3	-	3
Total	19	23	21	24	24	24	22	12	169

First Year, Semester I

S.N.	Category	Paper Code	Subject	L	T	P	Credits
1.	BSM	BSM-101	Calculus and Linear Algebra	3	1	0	4
2.	EF	BEC-101	Fundamentals of Electronics Engineering	3	1	2	5
3.	PS	BEE-106	Electrical Wiring	0	0	4	2
4.	EF	BME-101	Technical Art	0	0	4	2
5.	PLBSE	BCS-101	Introduction to Computer Programming	3	0	2	4
6.	HSSE	BHM-104	Human Values & Professional Ethics	2	0	0	2
			Total	11	2	12	19
1.	ECA-I		Induction Program	-	-	-	0

First Year, Semester II

S.N.	Category	Paper Code	Subject	L	T	P	Credits
1.	BSM	BSM-177	Engineering Physics	3	0	2	4
2.	EF	BEE-151	Fundamentals of Electrical Engineering	3	1	2	5
3.	BSM	BSM-152	Ordinary and Partial Differential Equations	3	1	0	4
4.	PS	BEE-157	Basics of Measuring & Protective Equipments	0	0	4	2
5.	EF	BCE-151	Engineering Graphics	0	0	4	2
6.	PLBSE	BME-154	Fundamentals of Mechanical Engineering	3	0	2	4
7.	HSS	BHM-151	Professional Communication	2	0	0	2
			Total	15	2	12	23
1.	ECA-II			-	-	-	0

Second Year, Semester III

S.N.	Category	Paper Code	Subject	L	T	P	Credits
1.	BSM	BSM-201	Complex Analysis and Numerical Methods	3	1	0	4
2.	EF	BEC-206	Digital Electronics & Circuits	3	0	2	4
3.	HSS	BHM-201	Scientific and Technical Writing	2	0	0	2
4.	PC	BEE-201	Electrical Machines-I	3	1	2	5
5.	PC	BEE-202	Basic System Analysis	3	1	0	4
6.	PLBSE	BSM-241	Environmental Chemistry	2	0	0	2
			Total	16	4	2	21
7.	ECA-III			-	-	-	0
8.	AC	AUC-01- AUC-15	Audit Course	1/2	-	-	½

Second Year, Semester IV

S.N.	Category	Paper Code	Subject	L	T	P	Credits
1.	BSM	BSM-251	Integral Transforms and Statistical Methods	3	1	0	4
2.	PC	BEE-251	Electrical Measurement & Measuring Instruments	3	0	2	4
3.	PC	BEE-252	Network Analysis and Synthesis	3	1	2	5

4.	PC	BEE-253	Electrical Machines-II	3	1	2	5
5.	PC	BEE-254	Power System-I	3	1	0	4
6.	PLBSE	BEE-255	Simulation Technique	0	0	4	2
			Total	15	4	10	24
7.	ECA-IV			-	-	-	0
8.	AC	AUC-01- AUC-15		1/2	-	-	½
9.	DM1	SEE-211	Scientific Computing Using MATLAB	3	1	0	4
	DM2	SEE-221	Energy Management	3	1	0	4
	DM3	SEE-231	Introduction to Power Electronics	3	1	2	5

Third Year, Semester V

S.N.	Category	Paper Code	Subject	L	T	P	Credits
1.	M	BHM-302/352	Industrial Management	2	0	0	2
2.	PC	BEE-301	Power System-II	3	0	2	4
3.	PC	BEE-302	Control System Engineering	3	1	2	5
4.	PC	BEE-303	Power Electronics	3	1	2	5
5.	PE1	BEE-326- BEE-328	Program Elective-1	3	1	0	4
6.	PLBSE	BEE-304	Microprocessor: Architecture, Programming, and Interfacing	3	0	2	4
			Total	17	3	8	24
7.	ECA-V			-	-	-	0
8.	DM1	SEE-312	Fuzzy Sets, Logic and Systems & Applications	3	1	0	4
	DM2	SEE-322	Solar Energy Systems	3	1	2	5
	DM3	SEE-332	Advanced Power Electronics	3	1	2	5

Third Year, Semester VI

S.N.	Category	Paper Code	Subject	L	T	P	Credits
1.	M	BHM-301/351	Engineering and Managerial Economics	2	0	0	2
2.	PC	BEE-351	Instrumentation Engineering	3	1	2	5
3.	PC	BEE-352	Protection & Switchgear	3	0	2	4
4.	PC	BEE-353	Digital Control System	3	1	2	4

5.	PE2	BEE-376- BEE-378	Program Elective-2	3	1	0	4
6.	P	BEE-370	Project Part-I	0	0	4	2
7.	S	BEE-380	Seminar	0	0	4	2
			Total	14	3	14	24
8.	ECA-VI			-	-	-	0
9.	DM1	SEE-313	Nonlinear System Analysis	3	1	0	4
	DM2	SEE-323	Facts Controllers & Devices	3	1	0	4
	DM3	SEE-333	Power Electronics Controlled Electric DC-Drives	3	1	0	4

Final Year, Semester VII

S.N.	Category	Paper Code	Subject	L	T	P	Credits
1.	PC	BEE-401	Electric Drives	3	1	2	5
2.	PC	BEE-402	Power System Operation and Control	3	1	0	4
3.	PC	BEE-403	Power Quality	3	0	0	3
4.	PE3	BEE-426- BEE-428	Program Elective-3	3	1	0	4
5.	OE	OEE-401- OEE-402	Open Elective	2	1	0	3
6.	P	BEE-440	Project Part-II	0	0	6	3
			Total	14	4	8	22
7.	ECA-VII			-	-	-	0
8.	DM1	SEE-414	Optimal And Adaptive Control Systems	3	1	0	4
	DM2	SEE-424	Restructured Flexible Ac Power System	3	1	0	4
	DM3	SEE-434	Power Electronics Applications	3	1	0	4

Final Year, Semester VIII

S.N.	Category	Paper Code	Subject	L	T	P	Credits
1.	IP	IEE-400	Industrial Practices	0	0	24	12
Without Industrial Practice (IP)							
2.	MP	BEE-480	Minor Project	0	0	8	4
3.	IE1	IEE-401	Industrial Elective 1	3	1	0	4
4.	IE2	IEE-405	Industrial Elective 2	3	1	0	4
			Total	6	2	8	12
	DM1	SEE-415	Research Project	0	0	4	2
	DM2	SEE-425	Research Project	0	0	4	2
	DM3	SEE-435	Research Project	0	0	4	2