

BACHELOR OF ENGINEERING IN ELECTRICAL ENGINEERING (BEE)

BATCH FALL 2023 (2K 23)

S.No	Course Code	Subjects	Knowledge area	CHs Teaching	CHs Labs	Semester
1	CSE-111	Information and Communication Technologies	Computing	2	1	1st
2	ELE-111	Workshop Practice	EE Foundation	0	1	1st
3	HUM-111	Functional English	Humanities	3	0	1st
4	HUM-112	Pakistan Studies	Humanities	2	0	1st
5	MTS-111	Calculus and Analytical Geometry	Natural Science	3	0	1st
6	PHY-111	Applied Physics	Natural Science	3	1	1st
Total CHs				13	3	16
7	HUM-121	Communication & Presentation Skills	Humanities	3	0	2nd
8	MTS-121	Linear Algebra & Differential Equations	Natural Science	3	0	2nd
9	HUM-122/3	Islamic Studies/ Ethics	Natural Science	2	0	2nd
10	ELE-121	Linear Circuit Analysis	EE Foundation	3	1	2nd
11	CSE-121	Computer Aided Design	EE Foundation	0	1	2nd
Total CHs				11	2	13
12	MTS-211	Multivariable Calculus	Natural Science	3	0	3rd
13	MCH-211/CSE-211	Computer Communication Network	IDEE-1	3	1	3rd
14	ELE-211	Electrical Network Analysis	EE Foundation	3	1	3rd
15	ESE-211	Electronic Devices and Circuits	EE Foundation	3	1	3rd
16	CSE-212	Programming for Engineers	Computing	2	1	3rd
Total CHs				14	4	18
17	MTS-221	Complex Variables & Transforms	Natural Science	3	0	4th
18	ELE-221	Electromagnetics Field Theory	Core (Breadth)	3	0	4th
19	ELE-222	Electrical Machines	Core (Breadth)	3	1	4th
20	CSE-221	Object Oriented Programming	Computing	2	1	4th
21	ESE-221	Digital Logic Design	EE Foundation	3	1	4th
Total CHs				14	3	17
22	MTS-311	Probability & Statistics	EE Foundation	3	0	5th
23	ELE-311/ESE-311	Power Generation/Electronic Circuit Design	Elective - I	3	1	5th
24	ELE-312	Signals and Systems	EE Foundation	3	1	5th
25	ELE-313	Instrumentation & Measurement	EE Foundation	3	1	5th
26	ESE-312	Embedded Systems	EE Foundation	3	1	5th
Total CHs				15	4	19
27	ESE-321	Power Electronics	Elective - II	3	1	6th
28	ELE-322	Communication Systems	Core (Breadth)	3	1	6th
29	CSE-321	Artificial Intelligence	IDEE-II	3	0	6th
30	MGT-321	Engineering Economics & Management	Management Science	3	0	6th
31	ELE-323	Control Systems	Core (Breadth)	3	1	6th
Total CHs				15	3	18
32	ELE-411/ESE-411	Power Distribution & Utilization/ Industrial Electronics	Elective – III	3	1	7th
33	HUM-411	Technical Writing	Humanities	2	0	7th
34	ELE-412/ESE-412	Power System Analysis/ Digital System Design	Elective - IV	3	1	7th
35	ELE-413/ESE-413	Power Transmission/ Nano Technology	Elective - V	3	0	7th
36	MGT-411	Project Management	Management Science	3	0	7th
37	ELE-419	Final Year Project-I	FYP	0	2	7th
Total CHs				14	4	18
38	ELE-421/ESE-421	Power System Stability & Control/ Microwave & RF	Elective - VI	3	1	8th
39	ELE-422/ESE-422	Power System Protection/ Robotics	Elective - VII	3	1	8th
40	MGT-421	Engineering Entrepreneurship	Management Science	3	0	8th
41	ELE-429	Final Year Project-II	FYP	0	4	8th
Total CHs				9	6	15
Overall Credit Hours (CHs)				105	29	
Grand Credit Hours (CHs)				134		
Pre-Requisite List						
S.No	Course Code	Subjects	Pre-Req			
1	MTS-121	Multivariate Calculus	MTS-111			
2	ELE-211	Electrical Network Analysis	ELE-121			
3	ELE-311/ESE-311	Power Generation/Electronic Circuit Design	ELE-222/ESE-211			