

BS Electrical Engineering Curriculum

S.No.	Group	Code	Title	Credit Hours
1	Humanities	CMS-101	Islamic Studies (For Muslims)	2+0
2		CMS-102	Ethics (For Non-Muslims)	2+0
3		CMS-103	Pakistan Studies	2+0
4		CMS-104	Engineering Economics	2+0
5		CMS-105	Communication Skills	2+0
6		CMS-206	Technical Writing	2+0
7		CMS-301	Principles of Management	2+0
8	Natural Sciences	PAM-130	Engineering Physics	3+1
9		CME-200	Applied Chemistry	2+0
10		PAM-201	Complex Variables and Transforms	3+0
11		PAM-101	Calculus-I	3+0
12		PAM-202	Calculus-II	3+0
13		PAM-242	Linear Algebra	2+0
14		PAM-255	Differential Equations	2+0
15		PAM-267	Probability and Random Variables	3+0
16		PAM-360	Numerical Methods	3+0
17	Electrical Engineering Foundation	EE-103	Engineering Drawing	1+1
18		EE-110	Basic Electrical Engineering	3+1
19		EE-120	Basic Electronics	3+1
20		EE-121	Introduction to Programming	2+1
22		EE-210	Electrical Machines-I	3+1
23		EE-211	Integrated Electronics	3+1
24		EE-220	Signals and Systems Theory	3+0
25		EE-221	Analog and Digital Electronics	3+1
26		EE-222	Network Analysis	3+0
27		EE-223	Electrical Machines-II	3+1
28		EE-224	Digital Logic Design	3+1
29		EE-310	Analog Filter Design	3+1
30		Electrical Engineering Core (Breadth)	EE-311	Microprocessors and Interfacing
31	EE-313		Electromagnetic Theory	3+0
32	EE-312		Measurement and Instrumentation	3+1
33	EE-320		Analog and Digital Communication	3+1
34	EE-431		Linear Control Systems	3+1
35	EE-322		Microcontrollers	3+1

37	Electronics Engineering Core (Depth)	EE-410	FPGA Based Design	3+1
38		EE-411	Power Electronics	3+1
39		EE-412	Transmission Lines & Waveguides	3+1
40	Electronics Engineering Core (Depth) Electives	EE-413	Digital Control System Analysis & Design	3+1
41		EE-414	Digital Signal Processing	3+1
42		EE-420	Industrial Drives	3+1
43		EE-421	Antenna Theory & Design	3+1
44		EE-422	VLSI Design	3+1
45		EE-423	Modern Electronic Manufacturing Process	3+1
46	Inter-Disciplinary Engineering (Breadth)	EE-407	*Nuclear Power Plant Systems	3+0
		ME-122	Workshop Practice	0+1
47		ME-198	Basic Mechanical Engineering	2+1
48		ME-199	Applied Thermodynamics	3+0
49		NE-404	*Basic Nuclear Engineering	3+0
50		EE-499	Thesis Project	1+5

Note:

* represents courses that would be offered as per Commission's Requirements.

The courses offered by the department in a semester can be changed depending on the availability of teachers and related facilities and will be notified one week before the start of the semester.

Students should take elective course according to their field of specialization.