

Department of Electronics Engineering, Main Campus
Curriculum for Session 2K17 onwards in accordance with PEC/HEC guidelines

1st Semester			
Code	Course Title	Credit Hours	
		Part-I	Part-II
BH-111	Functional English	3	0
BH-112	Calculus and Analytical Geometry	3	0
BH-113	Applied Physics	3	0
CS-114	Introduction to Computers	2	1
EN-115	Basic Electronic Engineering	3	1
	Total	14	2
	Semester Total for Part -I & II	16	
2nd Semester			
Code	Course Title	Credit Hours	
		Part-I	Part-II
BH-121	Communication Skills	3	0
BH-122	Pakistan Studies	2	0
BH-123	linear Algebra	3	0
BH-124	Chemistry	3	0
CS-125	Computer Programming	2	1
EN-126	Circuit Analysis-I	3	1
	Total	16	2
	Semester Total for Part -I & II	18	
	Total for First Year	35	
3rd Semester			
Code	Course Title	Credit Hours	
		Part-I	Part-II
BH-211	Differential Equations	3	0
EN-212	Computer - Aided Engineering Design	0	1
EN-213	Electronic Circuit Design	3	1
EN-214	Circuit Analysis-II	3	1
EN-215	Digital Logic Design	3	1
	Total	12	4
	Semester Total for Part -I & II	16	
4th Semester			
Code	Course Title	Credit Hours	
		Part-I	Part-II
BH-221	Complex Variables and Transforms	3	0
EN-222	Probability and Random Variables	3	0
EN-223	Electric Machines	3	1
EN-224	Electromagnetic Field Theory	3	0
EN-225	Microprocessors & Microcontrollers	3	1
	Total	15	2
	Semester Total for Part -I & II	17	
	Total for 2nd Year	33	
5th Semester			
Code	Course Title	Credit Hours	
		Part-I	Part-II

BH-311	Technical Report Writing & Presentation Skills	3	0
BH-312	Sociology	3	0
EN-313	Integrated Electronic	3	1
EN-314	Signal Processing	3	1
EN-315	Instrumentation and Measurements	3	1
	Total	15	3
	Semester Total for Part -I & II	18	
6th Semester			
Code	Course Title	Credit Hours	
		Part-I	Part-II
BH-321	Islamic Studies	2	0
BH-322	Psychology	3	0
BH-323	Engineering Economics	3	0
EN-324	Analog & Digital Communications	3	1
EN-325	Control Systems	3	1
	Total	14	2
	Semester Total for Part -I & II	16	
	Total for 3rd Year	34	
7th Semester			
Code	Course Title	Credit Hours	
		Part-I	Part-II
MS-411	Engineering Management	3	0
EN/CS-4xx	Elective-I	3	1
EN/CS-4xx	Elective-II	3	1
EN/CS-4xx	Elective III	3	0/1
EN-499A E1	Electronic Engineering Project	0	3
	Total	12	5/6
	Semester Total for Part -I & II	17/18	
8th Semester			
Code	Course Title	Credit Hours	
		Part-I	Part-II
MS-421	Professional and Social Ethics	3	0
EN/CS-4xx	Elective-IV	3	1
EN/CS-4xx	Elective-V	3	0/1
EN-499-B	Electronic Engineering Project	0	3
	Total	9	4/5
	Semester Total for Part -I & II	13/14	
	Total for Final year	30~32	
	Grand Total for Four Year	132~134	
	Abbreviations Used: BH: Basics Sciences & Humanities CS: Computer Sciences	EN: Electronic Engineering MS: Management Sciences	

List of Elective Courses

BH-426	Numerical Methods	(3+0)
EN-427	Power Electronics	(3+1)

EN-428	Industrial Electronics	(3+1)
EN-429	Linear Control System	(3+1)
EN-430	Digital Control System	(3+1)
EN-431	Industrial Control System	(3+1)
EN-432	Industrial Automation	(3+1)
EN-433	Introduction to Robotics	(3+1)
EN-434	Process Measurement Engineering	(3+1)
EN/CS-435	Introduction to Neural Networks	(3+0)
EN/CS-436	Artificial Intelligence	(3+1)
EN-437	Mechatronic Applications	(3+0)
EN/CS-438	Fuzzy Logic and Simulation	(3+0)
EN-439	Biomedical Instrumentation	(3+1)
EN-440	Biomedical Signal Analysis	(3+1)
EN-441	Medical Imaging	(3+1)
EN-442	Digital System Design	(3+1)
EN-443	Microelectronic Technology	(3+0)
EN-444	VLSI Design	(3+1)
EN-445	FPGA Based System Design	(3+1)
EN-446	Embedded System Design	(3+1)
EN-447	Computer Architecture	(3+1)
EN-448	Microcomputer Systems	(3+1)
EN-449	Hardware Software Codesign Techniques	(3+0)
EN-450	Digital Instrumentation Systems	(3+1)
EN-451	Laser and Fiber Optics	(3+0)
EN-452	Wireless Sensor Networks	(3+0)
EN-453	Filter Design	(3+1)
EN-454	Digital Signal Processing	(3+1)
EN/CS-455	Digital Image Processing	(3+1)
EN-456	Digital Speech Processing	(3+1)
EN/CS-457	Pattern Recognition and Matching	(3+0)