

Semester Wise Courses Electrical Engineering

Course Code	Course Title	CrHr	Pre-req	Course Code	Course Title	CrHr	Pre-req
Semester – I				Semester - II			
NS1101	Applied Physics	3+1	None	EE1202	Electronic Workshop	0+1	None
EE1101	Linear Circuit Analysis	3+1	None	NS1203	Linear Algebra	3+0	None
CM1101	Introduction to computing	1+1	None	EE1203	Digital Logic Design	3+1	None
HM1101	Functional English	3+0	None	CM1202	Programming Fundamentals	3+1	CM1101
HM1102	Islamic Studies	2+0	None	EE1204	Electronic Devices and Circuit	3+1	EE1101
NS1102	Calculus and Analytical Geometry	3+0	None	HM1203	Pakistan and Kashmir Studies	2+0	None
Sub-total		15+3 = 18		Sub-total		14+4=18	
Semester – III				Semester – IV			
NS2304	Complex Variables and Transforms	3+0	None	EE2407	Signals and Systems	3 + 1	NS-2304
HM2304	Communication Skills	2+0	None	EE2408	Probability Methods in Engineering	3 + 0	NS1102
EE2305	Engineering Drawing	0+1	None	EE2409	Introduction to Embedded Systems	3 + 1	EE1203, CM1202
NS2305	Differential Equations	3+0	None	NS2406	Numerical Analysis	3+0	None
EE2306	Electrical Network Analysis	3+1	EE1101	HM2305	Critical Thinking	3+0	None
CM2303	Data Structure and Algorithm	3 + 1	CM1202				
Sub-total		14+3=17		Sub-total		15+2=17	
Semester – V				Semester – VI			
EE3510	Electrical Machines	3+1	EE2306	HM-3606	Technical Report writing	3 + 0	None
EE3511	Communication System	3+1	EE2407 EE2408	HM-3607	Arabic	1+ 0	None
EE3512	Electromagnetic Field Theory	3 + 0	None	MS-3601	Entrepreneurship	3 + 0	None
EE3513	Linear Control Systems	3+1	EE2407	EE-36XX	Breadth Core-I	3 + 1	*CD
IE3501	Engineering Mechanics	3+0	None	EE-36XX	Breadth Core-II	3+1	*CD
				HM-3608	Organizational Behavior	3+0	
Sub-total		15+3=18		Sub-total		16+2=18	
Semester – VII				Semester – VIII			
EE-47XX	Depth Elective I	3+1	*CD	EE-48XX	Depth Elective – III	3 + 1	*CD
EE-47XX	Depth Elective II	3+0	*CD	EE-48XX	Depth Elective –IV	3 + 1	*CD
MS-4702	Engineering Economics	3+0	None	EE-48XX	Depth Elective – V	3 + 0	*CD
IE-4702	Thermodynamics	3+0	None	EE-4862	Senior Design Project – II	0 + 4	None
EE-4761	Senior Design Project – I	0+2	None				
Sub-total		12+3=15		Sub-total		9+6=15	
*CD= Depends on course offered				Grand Total: 110+26=136			

Breadth Elective courses					
Course Code	Electronics Stream	Pre-Req.	Course Code	Telecom Stream	Pre-Req.
EE-36XX	Electronic Circuit Design	None	EE-36XX	Computer Communication Networks	None
EE-36XX	Power Electronics	None	EE-36XX	Electronic Circuit Design	None
Depth Elective courses					
Course Code	Electronics		Course Code	Telecom	
EE-4X31	Industrial Electronics	Power Electronics	EE-4X41	Digital Communication	None
EE-4X32	VLSI Design	EE1204	EE-4X42	Optical Communications	
EE-4X33	Opto-Electronics		EE-4X43	Wireless and Mobile communication	EE3511
EE-4X34	Digital Control Systems	EE3513	EE-4X44	Antennas and Microwave	
EE-4X35	Solid State Devices	EE1204	EE-4X45	Satellite Communication	EE3511
EE-4X36	Introduction to Nano Technology		EE-4X46	Transmission and Switching Systems	None
EE-4X37	Integrated Electronics	None	EE-4X47	Navigation and Radar Systems	EE3511
EE-4X38	Digital System Design	EE2409			
Shared Depth Elective					
EE-4X51	Instrumentation and Measurements	None	EE-4X53	Data Communication	None
EE-4X52	Digital Signal Processing	None			