

BEE Courses to PLO Mapping

Table 2-2: Mapping of Telecom Courses with PLOs (Fall-19 and Beyond Curriculum)

		Telecom			P	LO - Lear	ning Do	mains an	d Taxo	nomy L	evels			
Sem	Course Code	Subject	1	2	3	4	5	6	7	8	9	10	11	12
1st	MA101	Calculus I	C1,C2,C3	C3,C4										
1st	PH102	Applied Physics		C1,C3,C1		C1,C3					C3			
1st	EE101L	Electric Circuit Analysis Laboratory				P1							P3	
1st	EE101	Electric Circuit Analysis	C1	C2	C3	C4	C3							
1st	MT171	Engineering Drawing					P3,P3							
1st	HU118	Islamic Studies								C1,C 4				A3
1st	HU121	Communication Skills										C1,C2,C3		
1st	HU115	Pakistan Studies						C1,C2						C3,C4
2nd	MA105	Multivariable Calculus	C1,C2	C2,C3,C4										
2nd	MT103	Workshop Practice	P3							A2	A4			
2nd	CE112L	Computer Programming Lab	P1	P2							A2			
2nd	CE112	Computer Programming	C1	C2	C2									
2nd	EE103L	Network Analysis Laboratory	P3			P4						A2		



2nd	EE103	Network Analysis	C2	C3		C3					
2nd	MA217	Linear Algebra and Differential Equation	C1,C2,C3	C4,C4							
2nd	HU215	Ethics							C2	A3	A2
3rd	MA218	Complex Variables and Transforms	C1,C2,C3	C4							
3rd	EE208L	Analog Electronics Laboratory		P2		Р3				P3, A2	
3rd	EE208	Analog Electronics	C2	C3	C3	C3					
3rd	EE223L	Digital Logic Design Laboratory			P2					P3	
3rd	EE223	Digital Logic Design	C2	C2,C3	C3						
3rd	CE113L	Object-Oriented Programming Laboratory		P3	P4					A3	
3rd	CE113	Object Oriented Programming		C2	C3					C3	
3rd	EE211	Electricity and Magnetism	C1, C2	C1, C3							
4th	HUXX X	International Relations						C1,C2			C3,C4
4th	EE235	Signals and Systems	C2,C3	C3				1 1			
4th	EE235L	Signals and Systems Laboratory					P2			P4	
4th	EE209	Electronic Circuit Design	C2	C4	C3	C3					



4th	EE209L	Electronic Circuit Design Laboratory			P4	P3			A2			
4th	EE241	Electrical Machines	C1	C3	C4							
4th	EE241L	Electrical Machines Laboratory					P3		A3			
4th	MA303	Probability and Random Variables	C1	C3, C4								
5th	HU114	Technical English								C2, C3, C3		
5th	MA200	Numerical Methods		C1, C2	C3, C4							
5th	EE328L	Microprocessors & Microcontrollers Laboratory					P3		A2			
5th	EE328	Microprocessors & Microcontrollers	C2, C3		C3		C4					
5th	EE314L	Antenna and Wave Propagation Laboratory				P4	P4			A3		
5th	EE314	Antenna and Wave Propagation	C2	C3		C4		C2				
5th	EE361L	Computer Networks Laboratory					P2			A2	P4	
5th	EE361	Computer Networks	C2	C3	C4			C2				
6th	EE374L	Analog Communications Laboratory					P4		C6, A5			
6th	EE492	Final Year Project I										



6th	EM332	Engineering Economics		C3				C4				C3	
6th	EE374	Analog Communications		C2	C4								C3
6th	HU307	Technical Report Writing									C2, C3, C4		
6th	EE383L	Electrical Measurements and Instr. Laboratory			Р5		P4	A3					
6th	EE383	Electrical Measurements and Instr.	C2		C3	C4			C2				
6th	XXX	IDEE											1
7th	EE493	Final Year Project II											1
7th	EE355L	Control Systems Laboratory				P3	P3			P3	A3		+
7th	EE355	Control Systems	C3,C3	C4	C4								1
7th	EE338	Digital Signal Processing	C3	C1	C4				C3				1
7th	EE474	Digital Communication I	C2	C4	C3								+
7th	EE474L	Digital Communication I Laboratory					P2			A2			
	EE416	Microwave Theory and Techniques		C3	C4	C4			C5				-
7th	EE416L	Microwave Theory and Techniques Laboratory					P2			A2			+
7th	EE338L	Digital Signal Processing Laboratory			P5		P5			A3			+
8th	EE477	Digital Communication II		C1, C2	C2	C2	P2						1



8th	EE477L	Digital Communication II Laboratory		Р	22	Р3					
8th	EE463	Telecom Networks	C3	С	25			C5			
8th	EE494	Final Year Project III									
8th	EM436	Engineering Management and Entrepreneurship					C2		C3	C3	
8th	HUXX X	Language Elective									
8th	EE463L	Telecom Networks Laboratory				Р3					A4



Table 2-3: Mapping of Electronics Courses with PLOs (Fall-19 and Beyond Curriculum)

Electroni	cs		Learning I	Domains and	Taxonon	ny Levels								
Semester	Course Code	Subject	1	2	3	4	5	6	7	8	9	10	11	12
1st	MA101	Calculus I	C1,C2,C3	C3,C4										
1st	PH102	Applied Physics		C1,C3,C1		C1,C3					C3			
1st	EE101L	Electric Circuit Analysis Laboratory				P1							Р3	
1st	EE101	Electric Circuit Analysis	C1	C2	C3	C4	C3							
1st	MT171	Engineering Drawing					P3,P3							
1st	HU118	Islamic Studies								C1,C4				A3
1st	HU121	Communication Skills										C1,C2,C3		
1st	HU115	Pakistan Studies						C1,C2						C3,C4
2nd	MA105	Multivariable Calculus	C1,C2	C2,C3,C4										
2nd	MT103	Workshop Practice	P3							A2	A4			
2nd	CE112L	Computer Programming Lab	P1	P2							A2			
2nd	CE112	Computer Programming	C1	C2	C2									



		Network Analysis										
2nd	EE103L	Laboratory	P3			P4					A2	
2nd	EE103	Network Analysis	C2	C3		C3						
2nd	MA217	Linear Algebra and Differential Equation	C1,C2,C3	C4,C4								
2nd	HU215	Ethics							C2	A3		A2
3rd	MA218	Complex Variables and Transforms	C1,C2,C3	C4								
3rd	EE208L	Analog Electronics Laboratory		P2		Р3				P3, A2		
3rd	EE208	Analog Electronics	C2	C3	C3	C3						
3rd	EE223L	Digital Logic Design Laboratory			P2					P3		
3rd	EE223	Digital Logic Design	C2	C2,C3	C3							
3rd	CE113L	Object-Oriented Programming Laboratory		Р3	P4					A3		
3rd	CE113	Object Oriented Programming		C2	C3					C3		
3rd	EE211	Electricity and Magnetism	C1, C2	C1, C3								
4th	HUXX X	International Relations						C1,C2				C3,C4
4th	EE235	Signals and Systems	C2,C3	C3			1					



4th	EE235L	Signals and Systems Laboratory					P2			P4			
4th	EE209	Electronic Circuit Design	C2	C4	C3	C3							
4th	EE209L	Electronic Circuit Design Laboratory			P4	P3				A2			
4th	EE241	Electrical Machines	C1	C3	C4								
4th	EE241L	Electrical Machines Laboratory					P3			A3			
4th	MA303	Probability and Random Variables	C1	C3, C4									
5Th	HU114	Technical English									C2, C3, C3		
5Th	EM332	Engineering Economics		C3				C4				C3	
5Th	EE328L	Microprocessors & Microcontrollers Laboratory					P3			A2			
5Th	EE328	Microprocessors & Microcontrollers	C2, C3		C3		C4						
5Th	EE381L	Power Electronics I Laboratory					P3			A2			
5Th	EE381	Power Electronics I	C2	C3	C4								



5Th	EE383L	Electrical Measurements and Instr. Laboratory			Р5		P4	Р3				
		Electrical Measurements and										
5Th	EE383	Instr.	C2,C2		C3	C4						
6Th	EE492	Final Year Project I										
6Th	EE355L	Control Systems Laboratory				P3	P3			P3	A3	
6Th	EE355	Control Systems	C3,C3	C4	C4							
6Th	HU307	Technical Report Writing									C2, C3, C4	
6Th	EE338L	Digital Signal Processing Laboratory			P5		Р5			A3		
6Th	EE304	Digital Electronics	C2	C4	C4							
6Th	EE304L	Digital Electronics laboratory					P3	A3				
6Th	MA200	Numerical Methods		C1, C2	C3, C4							
6Th	EE338	Digital Signal Processing	C3	C1	C4				C3			
7Th	EE493	Final Year Project II										



		Engineering										
7Th	EM436	Management and Entrepreneurship						C2		C3	C3	
7Th	EE429	FPGA Based Design			C4	C4			C3			
7Th	EE429L	FPGA Based Design laboratory				P4	P4			A3		
7Th	EE314	Antenna and Wave Propagation	C2	C3		C4			C2			
7Th	EE406	Linear Integrated Circuit Design	C2	C2	C3,C3							
7Th	EE406L	Linear Integrated Circuit Design Laboratory					P2		P2			
7Th	EE314L	Antenna and Wave Propagation Laboratory	Р3				Р3					
8Th	EE407	VLSI Design		C4	C3	C4			C3			
8Th	XXX	IDEE										
8Th	EE475	Analog & Digital Communication	C2, C2	C2, C3	C4							
8Th	EE475L	Analog & Digital Communication Laboratory			Р3		P2			A3		
8Th	EE494	Final Year Project III							C4			



8Th	HUXX X	Language Elective							
8Th	EE407L	VLSI Design laboratory		P4	Р3		A3		



 Table 2-4: Mapping of Power Courses with PLOs (Fall-19 and Beyond Curriculum)

Power	r		Learning D	Oomains and	Taxonom	y Levels								
Sem ester	Cours e Code	Subject	1	2	3	4	5	6	7	8	9	10	11	12
1st	MA10 1	Calculus I	C1,C2,C3	C3,C4										
1st	PH10 2	Applied Physics		C1,C3,C1		C1,C3					C3			
1st	EE101 L	Electric Circuit Analysis Laboratory				P1							P3	
1st	EE101	Electric Circuit Analysis	C1	C2	C3	C4	C3							
1st	MT17 1	Engineering Drawing					P3,P3							
1st	HU11 8	Islamic Studies								C1,C 4				A3
1st	HU12 1	Communication Skills										C1,C2,C3		
1st	HU11 5	Pakistan Studies						C1,C2						C3,C4
2nd	MA10 5	Multivariable Calculus	C1,C2	C2,C3,C4										
2nd	MT10 3	Workshop Practice	Р3							A2	A4			



2nd	CE11 2L	Computer Programming Lab	P1	P2					A2		
2nd	CE11 2	Computer Programming	C1	C2	C2						
2nd	EE103 L	Network Analysis Laboratory	Р3			P4				A2	
2nd	EE103	Network Analysis	C2	C3		C3					
2nd	MA21 7	Linear Algebra and Differential Equation	C1,C2,C3	C4,C4							
2nd	HU21 5	Ethics						C2	A3		A2
3rd	MA21 8	Complex Variables and Transforms	C1,C2,C3	C4							
3rd	EE208 L	Analog Electronics Laboratory		P2		Р3			P3, A2		
3rd	EE208	Analog Electronics	C2	C3	C3	C3					
3rd	EE223 L	Digital Logic Design Laboratory			P2				P3		
3rd	EE223	Digital Logic Design	C2	C2,C3	C3						
3rd	CE11 3L	Object-Oriented Programming Laboratory		P3	P4				A3		
3rd	CE11 3	Object Oriented Programming		C2	C3				C3		
3rd	EE211	Electricity and Magnetism	C1, C2	C1, C3							



4th	HUX XX	International Relations						C1,C2			C3,C4
4th	EE235	Signals and Systems	C2,C3	C3							
4th	EE235 L	Signals and Systems Laboratory					P2		P4		
4th	EE209	Electronic Circuit Design	C2	C4	C3	C3					
4th	EE209 L	Electronic Circuit Design Laboratory			P4	P3			A2		
4th	EE241	Electrical Machines	C1	C3	C4						
4th	EE241 L	Electrical Machines Laboratory					P3		A3		
4th	MA30 3	Probability and Random Variables	C1	C3, C4							
5th	EE383 L	Electrical Measurements and Instr. Laboratory			P5		P4	A3			
5th	EE383	Electrical Measurements and Instr.	C2,C2		C3	C4					
5th	HU11 4	Technical English								C2, C3, C3	
5th	EE328 L	Microprocessors & Microcontrollers Laboratory					Р3		A2		
5th	EE328	Microprocessors & Microcontrollers	C2, C3		C3		C4				



	EE381	Power Electronics I				1		1					
5th	L	Laboratory					P3			A2			
5th	EE381	Power Electronics I	C2	C3	C4								
5th	EE347	Power Distribution and Utilization Systems	C2	C3	C4				C2				
6th	EE355	Control Systems	C3,C3	C4	C4								
6th	EE348 L	Power Generation Systems Laboratory				P5	P4						A4
6th	EE355 L	Control Systems Laboratory				P3	Р3			Р3	A3		
6th	EE338	Digital Signal Processing	C3	C1	C4				C3				
6th	EE348	Power Generation Systems		C3	C4				C3				
6th	HU30 7	Technical Report Writing									C2, C3, C4		
6th	MA20 0	Numerical Methods		C1, C2	C3, C4								
6th	EE492	Final Year Project I											
6th	EE338 L	Digital Signal Processing Laboratory			P5		P5			A3			
7th	EE382	Power Electronics II	C2	C4	C5							1	1
7th	EE382 L	Power Electronics II Laboratory				P3	P2					Р3	



7th	EM33 2	Engineering Economics		C3				C4				C3	
7th	EE444	Power Transmission Systems	C2	C4	C4				C3				
7th	EE444 L	Power Transmission Systems Laboratory		P2		P3	P3						
7th	EE493	Final Year Project II											
7th	EE475 L	Analog & Digital Communication Laboratory			P3		P2				A3		
7th	EE475	Analog & Digital Communication	C2, C2	C2, C3	C4								
8th	HUX XX	Language Elective											
8th	EE494	Final Year Project III											
8th	EE445	High Voltage Engineering		C3	C4				C2				
8th	EM43 6	Engineering Management and Entrepreneurship						C2			C3	C3	
8th	XXX	IDEE								<u> </u>			
8th	EE445 L	High Voltage Engineering Laboratory			P3		P3				P4		