

Semester – 1			
Code	Subjects	Pre – Requisite	Co – Requisite
PHY-IXX	Mechanics and Wave Motion (3+1)	--	Calculus
ME-238	Thermodynamics (2+1)	--	--
IS-101	Islamic and Pakistan Studies-I/Ethics (3+0)	--	--
MA-123	Calculus (3+0)	--	--
EE-132	Introduction to Computing and Data Science (3+1)	--	--
HU-111	Communication Skills (3+0)	--	--
Semester – 2			
PHY – IXX	Electricity and Magnetism (3+1)	--	--
MA-224	Multivariate Calculus	Calculus	--
EE-100	Electric Circuits (3+1)	--	--
EE-133	Programming Fundamentals (3+1)	--	--
EE-101	Electrical and Electronics Workshop (0+1)	--	--
MA-229	Ordinary Differential Equations (2+0)	--	Multivariate Calculus
Semester – 3			
EE-110	Circuit Analysis and Design (3+1)	Electric Circuits	--
EE-250	Electric Machinery Fundamentals (3+1)	Electric Circuits	Circuit Analysis and Design (3+1)
HU-221	Technical Writing and Presentation Skills (3+0)	--	--
MA-234	Linear Algebra (3+0)	--	--
EE-233	Discrete Mathematics (2+0)	Calculus	--
ME-100L	Workshop Practice (0+1)	--	--
Semester – 4			
EE-216	Electronics Devices and Circuits (3+1)	Electric Circuits	--
EE-220	Signals and Systems (3+0)	--	--
EE-272	Digital Systems (3+1)	--	--
EE-302	Applied Probability (3+0)	--	--
EE-234	Data Structures and Algorithms (2+1)	Programming Fundamentals	--
HU-IXX	International Language (0+1)	--	--
Semester – 5			
EE-273	Microprocessor Systems (3+1)	Programming Fundamentals	--
EE-356	Power Transmission Distribution & Utilization (3+0)	Circuit Analysis and Design	--
EE-322	Analog and Digital Communications (3+1)	Signals and Systems, Applied Probability	--
EE-384	Electromagnetics and Its Applications (3+0)	Multivariate Calculus, Electricity and Magnetism	--
XP-YZW	Non-Engineering Elective (3+0)	--	--
Semester - 6			
EE-312	Power Electronics (3+1)	Electronics Devices and Circuits	--
EE-439	Introduction to Machine Learning (3+0)	Linear Algebra, Applied Probability	--
EE-451	Power System Analysis and Design (3+1)	Power Transmission Distribution & Utilization	--

EE-384	Digital Signal Processing (3+1)	Signals and Systems	--
EE-452	Renewable Electrical Energy Systems (3+0)	--	--
EE-475	Computer Architecture (3+1)	Digital Systems	--
EE-486	Microwave and Antenna Engineering (3+1)	--	--
EE-340	Control Systems (3+1)	--	--
MGT-428	Professional Ethics (3+0)	--	--
Semester - 7			
EE-453	Power System Operation and Controls (3+1)	Power System Analysis and Design	--
EE-432	Computer Networks (3+1)	--	--
EE-454	Power System Protection (3+1)	Power System Analysis and Design	--
EE-476	Introduction to VLSI Systems (3+1)	--	--
IS-201	Islamic & Pakistan Studies-II/Ethics (3+0)	--	--
MGT-XYZ	Management Elective –I (3+0)	--	--
EE-499a	Project (Phase-I) (3+0)	--	--
Semester - 8			
EE-450	High Voltage Engineering (3+1)	--	--
EE-431	Operating Systems (3+1)	--	--
EE-411	Industrial Control Systems (3+1)	--	--
EE-419	Electrical Instruments and Measurements (3+1)	--	--
EE-450	Introduction to Smart Grids (3+0)	--	--