Scheme of studies for BE (Electrical) for Batch 2025 onwards

Electrical Engineering

First Year Fall Semester

Course Code	Course Title	Th	Pr	Total
		Credit Hrs.		
EE-125	Basic Electrical Engineering	3	1	4
EA-128	Functional English	3	0	3
MT-116	Calculus & Analytical Geometry	3	0	3
EF-101	IT Fundamentals & Applications	2	1	3
ES-206 / ES-209	Islamic Studies / Ethical Behavior	2	0	2
ES-105/ ES-127	Pak. Studies/Pak. Studies (For Foreigners)	2	0	2
CY-100	Essentials of Chemistry (For Computer Science Background Students)	NC		
	Total:	**15**	**2**	**17**

First Year Spring Semester

Course Code	Course Title	Th	Pr	Total
		Credit Hrs.		
EE-127	Circuit Analysis	3	1	4
MT-221	Linear Algebra & Ordinary Differential Equations	3	0	3
EE-164	Computer Programming	2	1	3
ES-108	Ideology and Constitution of Pakistan	2	0	2
PH-129	Applied Physics	3	0	3
	Total:	**13**	**2**	**15**

Second Year Fall Semester

Course Code	Course Title	Th	Pr	Total
		Credit Hrs.		
EL-240	Electronic Devices and Circuits	3	1	4
EE-264	Data Structures and Algorithms	2	1	3
MT-226	Multi Variable Calculus	3	0	3
EA-244	Academic Reading and Writing+	3	0	3
EE-111	Engineering Drawing & Workshop Practice	0	2	2
EF-201	Civics and Community Engagement	2	0	2
	Total:	**13**	**4**	**17**

Second Year Spring Semester

Course Code	Course Title	Th	Pr	Total
		Credit Hrs.		
EE-282	Electromagnetic Fields	3	0	3
EE-233	Signals and Systems	3	0	3
CS-220	Digital Logic Design	3	1	4
EF-200	Community Service	NC		
CE-109	Engineering Surveying-I	2	1	3
ME-116	Basic Mechanical Engineering	3	0	3
EE-348	Electrical Machines I	2	0	2
	Total:	**16**	**2**	**18**

Third Year Fall Semester					Third Year Spring Semester				
Course Code	Course Title	Credit Hrs.			Course Code	Course Title	Credit Hrs.		
		Th	Pr	Total			Th	Pr	Total
EE-396	Digital Signal Processing	3	1	4	EE-362	Power System Analysis	3	1	4
MT-442	Numerical Methods	3	0	3	EE-355	Embedded Systems	2	1	3
EE-224	Instrumentation and Measurement	2	1	3	EA/ES ###	Foreign Language-I	NC		
MG-485	Entrepreneurship	2	0	2	EE-314	Power Electronics	3	1	4
MT-331	Probability and Statistics	3	0	3	EE-359	Electrical Power Distribution and Utilization	3	1	4
EE-347	Electrical Machines II	2	1	3	EE-265	Artificial Intelligence	2	1	3
	Total:	15	3	18		Total:	13	5	18

Final Year Fall Semester					Final Year Spring Semester				
Course Code	Course Title	Credit Hrs.			Course Code	Course Title	Credit Hrs.		
		Th	Pr	Total			Th	Pr	Total
EE-457	Electrical Power System Protection	3	1	4	MG-482	Organizational Behavior	3	0	3
EE-401	Electrical Engineering Design Project	0	3	3	CS-439	Computer Communication Networks	2	0	2
EE-352	Electrical Power Transmission	3	0	3	EE-401	Electrical Engineering Design Project	0	3	3
EE-375	Feedback Control Systems	3	1	4	EE-414	Power Generation	3	0	3
EA/ES ###	Foreign Language-II	NC			EF-305	Engineering Economics and Management	3	0	3
TC-306	Communication Systems	3	0	3	EF-309	Occupational Safety and Health*	1	0	1
	Total:	12	5	17		Total:	12	3	15