



3.1.9 Electrical Engineering

FIRST YEAR

Fall Semester			Spring Semester		
Course Code	Course Title	Credit Hours Th Pr Total	Course Code	Course Title	Credit Hours Th Pr Total
EE-125	Basic Electrical Engineering	3 1 4	EE-127	Circuit Analysis	3 1 4
EA-128	Functional English	3 0 3	MT-221	Linear Algebra & Ordinary Differential Equations	3 0 3
MT-116	Calculus & Analytical Geometry	3 0 3	EE-164	Computer Programming	2 1 3
EF-101	IT Fundamentals & Applications	2 1 3	ES-108	Ideology and Constitution of Pakistan	2 0 2
ES-206 /	Islamic Studies /	2 0 2	PH-129	Applied Physics	3 0 3
ES-209	Ethical Behavior				
ES-105/	Pak. Studies/	2 0 2			
ES-127	Pak. Studies (For Foreigners)				
CY-100	Essentials of Chemistry	NC NC			
(For Computer Science background Students)					

SECOND YEAR

Fall Semester			Spring Semester		
Course Code	Course Title	Credit Hours Th Pr Total	Course Code	Course Title	Credit Hours Th Pr Total
EL-240	Electronic Devices and Circuits	3 1 4	EE-282	Electromagnetic Fields	3 0 3
EE-264	Data Structures and Algorithms	2 1 3	EE-233	Signals and Systems	3 0 3
MT-226	Multi Variable Calculus	3 0 3	CS-220	Digital Logic Design	3 1 4
EA-244	Academic Reading and writing	3 0 3	EF-200	Community Service	- - NC
EE-111	Engineering Drawing & Workshop Practice	0 2 2	CE-109	Engineering Surveying-I	2 1 3
EF-201	Civics and Community Engagement	2 0 2	ME-116	Basic Mechanical Engineering	3 0 3
			EE-348	Electrical Machines I	2 0 2

THIRD YEAR

Fall Semester			Spring Semester		
Course Code	Course Title	Credit Hours Th Pr Total	Course Code	Course Title	Credit Hours 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

FINAL YEAR

Fall Semester			Spring Semester		
Course Code	Course Title	Credit Hours Th Pr Total	Course Code	Course Title	Credit Hours Th Pr Total
EE-457	Electrical Power System Protection	3 1 4	MG-482	Organizational Behaviour	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

* Duration one academic year: Requires literature survey and preliminary work during this Semester

