

Course Scheme of Studies applicable on batch 2023 & Onwards;

FIRST YEAR OF ENGINEERING									
FE (IE) Fall Semester					FE (IE) Spring Semester				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
HS115	Functional English	2	0	2	HS121	Communication Skills	3	0	3
MS111	Calculus and Analytical Geometry	3	0	3	HS122 HS123	Islamic Studies (Muslims) Ethical Behaviour (Non-Muslims)	2	0	2
MS114	Applied Physics	3	1	4	MS121	Differential Equations	3	0	3
IE114	Engineering Drawing	0	1	1	IE121	Basic Electronics	3	1	4
IE115	Engineering Materials & Workshop	1	1	2	IE122	Fabrication Workshop	0	1	1
IE116	Linear Circuit Analysis	3	1	4	IE125	Computer Programming	3	1	4
IE117	Introduction to Computing	1	1	2					
Total=					Total=				
		13	5	18			14	3	17
SECOND YEAR OF ENGINEERING									
SE (IE) Fall Semester					SE (IE) Spring Semester				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
HS231	Pakistan Studies	2	0	2	MS241	Linear Algebra	3	0	3
MS231	Complex Variables & Transforms	3	0	3	IE245	Digital Logic Design	3	1	4
IE234	PCB Manufacturing	1	1	2	IE246	Instrumentation & Measurements	3	1	4
IE235	Electronic Circuit Design	3	1	4	IE247	Basic Mechanical Engineering	2	0	2
IE231	Electromagnetic Field Theory	2	0	2	IE248	Electrical Network Analysis	3	1	4
IE357	Electrical Machines	3	1	4	HS200	Community Service	-	-	NC
Total =					Total=				
		14	3	17			14	3	17
THIRD YEAR OF ENGINEERING									
TE (IE) Fall Semester					TE (IE) Spring Semester				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
HS351	Technical Report Writing and Professional Skills	2	0	2	MS361	Probability & Statistics	3	0	3
IE352	Integrated Circuits	3	1	4	IE361	Feedback Control Systems	3	1	4
IE358	Microprocessors and Microcontrollers	3	1	4	IE364	Embedded Systems	2	1	3
IE356	Signals & Systems	3	1	4	IE484	Communication Systems	3	1	4
IE362	Power Electronics	3	1	4	IE471	Digital Signal Processing	3	1	4
					HSXXX	Foreign Language I	-	-	NC
Total =					Total=				
		14	4	18			14	4	18
FOURTH YEAR OF ENGINEERING									
BE (IE) Fall Semester					BE (IE) Spring Semester				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
MS484	Entrepreneurship	2	0	2	MS471	Numerical Methods	3	0	3
IE475	Artificial Intelligence	3	1	4	MS483	Engineering Economics & Management	3	0	3
EL47X	Elective I (Engineering)	3	1	4	EL48X	Elective II (Non Engineering)	3	0	3
IE473	Industrial Process Control	2	1	3	IE483	Industrial Instrumentation Systems	2	1	3
IE485	Final Year Design Project	0	3	3	IE485	Final Year Design Project	0	3	3
HSXXX	Foreign Language II	-	-	NC					
Total =					Total=				
		10	6	16			11	4	15
GRAND TOTAL:= 136 Credit Hours									

Elective I (Engineering)

- EL471 Electronic Motor Drives (3+1)
- EL472 Digital System Design (3+1)
- EL473 Digital Control Systems (3+1)
- EL474 Robotics (3+1)

Elective II (Non- Engineering)

- EL481 Organizational Behavior (3+0)
- EL482 Professional Ethics (3+0)
- EL483 Sociology for Engineers (3+0)

INSTITUTE OF INDUSTRIAL ELECTRONICS ENGINEERING

Map of Pre-Requisite Courses for BE (Industrial Electronics Engineering)

