

# COURSE SCHEME OF B.E IN INDUSTRIAL ELECTRONICS

FIRST YEAR OF ENGINEERING									
FE (IE) Fall (First) Semester					FE (IE) Spring Semester				
Subj. Code	Course Title	Credit Hours			Subj. Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
HS114	Functional English	3	0	3	HS121	Communication Skills	3	0	3
MS111	Calculus and Analytical Geometry	3	0	3	HS122	Islamic Studies (For Muslims)	2	0	2
					HS123	Ethical Behaviour (For Non-Muslims)			
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	IE238	Introduction to Computer & Programming	3	1	4
HSK1	Chinese Language Course	-	-	-	HSK2	Chinese Language Course	-	-	-
Total =		13	4	17	Total=		14	3	17
SECOND YEAR OF ENGINEERING									
SE (IE) Fall Semester					SE (IE) Spring Semester				
Subj. Code	Course Title	Credit Hours			Subj. 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
IE239	Electromagnetic Field Theory	3	0	3	IE248	Electric Network Analysis	3	1	4
IE366	Object Oriented Programming	3	1	4	HS200	Community Services	-	-	-
Total =		15	3	18	Total=		14	3	17
THIRD YEAR OF ENGINEERING									
TE (IE) Fall Semester					TE (IE) Spring Semester				
Subj. Code	Course Title	Credit Hours			Subj. 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 System	3	1	4
IE355	Microprocessor Architecture & Programming	3	1	4	IE362	Power Electronics	3	1	4
IE356	Signals & Systems	3	1	4	IE363	Embedded Systems	2	1	3
IE357	Electrical Machines	3	1	4	IE484	Communication Systems	3	1	4
Total =		14	4	18	Total=		14	4	18
FOURTH YEAR OF ENGINEERING									
BE (IE) Fall Semester					BE (IE) Spring Semester				
Subj. Code	Course Title	Credit Hours			Subj. Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
MS484	Entrepreneurship	2	0	2	MS471	Numerical Methods	3	0	3
IE471	Digital Signal Processing (DSP)	3	1	4	MS483	Engineering Economics & Management	3	0	3
EL47X	Elective I	3	1	4	EL48X	Elective II	3	0	3
IE473	Industrial Process Control	2	1	3	IE482	Industrial Instrumentation Systems	2	1	3
IE478	Industrial Electronics Engineering Project Work I	0	3	3	IE488	Industrial Electronics Engineering Project Work II	0	3	3
Total =		10	6	16	Total=		11	4	15
<b>GRAND TOTAL:= 136 Credit Hours</b>									

Elective I

EL471 Electronic Motor Drives (3+1)

EL472 Digital System Design (3+1)

EL473 Digital Control Systems (3+1)

Elective II

EL481 Organizational Behavior (3+0)

EL482 Professional Ethics (3+0)

EL483 Sociology for Engineers (3+0)