

Indian Institute of Information Technology Pune

Curriculum Structure and Detailed Syllabus (Electronics and Communication Engineering)

Semester III							Semester IV						
S.No	Course Type	Course Name	L	T	P	Credits	S.No	Course Type	Course Name	L	T	P	Credits
1	BSC	Ordinary Differential Equation and Multivariate Calculus	2	1	0	3	1	BSC	Vector calculus and Partial Differential Equations	2	1	0	3
2	BSC	Science of Living System	3	0	0	3	2	HSMC	Professional Communication Skill	1	0	0	1
3	HSMC	Innovation	1	0	0	1	3	SC1	Advanced Microprocessor and its interfacing	3	0	2	4
4	SC1	Signals and Linear Systems	3	1	0	4	4	SC2	Digital System Design	3	0	2	4
5	SBC	Simulation Laboratory	0	0	4	2	5	SC3	Analog Communication	3	0	2	4
6	SC2	Microprocessor and Microcontroller	3	0	2	4	6	SC4	Modern Control System	3	0	2	4
7	SC3	Linear Integrated Circuits	3	0	2	4	7	EAA	Yoga Course	1*	0	0	0
8	SC4	Network Analysis and Synthesis	3	0	0	3	8	MLC	Engineering Ethics & Management	1	0	0	1
9	EAA	Yoga Course	1*	0	0	0							
Total Engagement / Credits			28/24				Total Engagement / Credits			26/21			
Semester V							Semester VI						
S.No	Course Type	Course Name	L	T	P	Credits	S.No	Course Type	Course Name	L	T	P	Credits
1	SC1	Departmental Elective - I	3	0	2	4	1	SC1	Departmental Elective - II	3	0	2	4
2	SC2	Embedded Systems	3	0	2	4	2	SC2	Computer Systems and Organization	3	0	0	3
3	SC3	Digital Signal Processing	3	0	0	3	3	SC3	Digital Communication	3	0	0	3
4	LC3	Digital Signal Processing Laboratory	0	0	2	1	4	LC3	Digital Communication Laboratory	0	0	2	1
5	MLC	Electromagnetics, Waveguides and Antenna	3	0	2	4	5	SC4	RF and Microwave Engineering	3	0	2	4
6	BSC	Probability and Random Processes	3	0	0	3	6	MIN	Minor Project (Design, simulate, prototype and Testing)	0	1	4	3
7	SC4	Measurement Techniques and Instrumentation	3	0	2	4	7	HSMC	Entrepreneurship Studies	1	0	0	1
8	IT	Internship [§]	0	0	0	1	8	LLC	Liberal Learning Course	1	0	0	1
9	LLC	Liberal Learning Course	1	0	0	1							
Total Engagement / Credits			29/25				Total Engagement / Credits			25/20			
Semester VII							Semester VIII						
S.No	Course Type	Course Name	L	T	P	Credits	S.No	Course Type	Course Name	L	T	P	Credits
1	IDOE	Open Elective - I	3	0	0	3	1	IDOE	Open Elective - II	3	0	0	3
2	SC1	Departmental Elective - III	3	0	2	4	2	SC1	Departmental Elective - IV	3	0	0	3
3	SC2	Information Theory and Coding	3	0	2	4	3	SC2	Optical Signals, Devices and Systems	3	0	2	4
4	SC3	Android Application Development	3	0	2	4	4	SC3	Wireless and Mobile Communication	3	0	2	4
5	HSMC	Patents, Copyrights and Intellectual Property Law	1	0	0	1	5	MAP	Major Project -Part II	0	0	12	6
6	MAP	Major Project -Part I	0	0	8	4							
7	IT	Internship [§]	0	0	0	1							
Total Engagement / Credits			27/21				Total Engagement / Credits			28/20			

Open Elective -I

Complex System Design
Internet of Things

Departmental Elective -I

Digital CMOS VLSI Design
Image and Video Processing
Multirate and Adaptive signal processing

Departmental Elective -III

MEMS
Deep Learning
Random Variables and Processes
Biomedical Devices and Bioelectronics

List Of Abbreviation

BSC	Basic Science Course
MLC	Mandatory Learning Course
SC	Program Core Course
LC	Laboratory Core Course
HSMC	Humanities/Social Sciences/Management Course
IT	Summer Internship
MIN	Minor Project
IDOE	Inter Disciplinary Open Elective Course
MAP	Major Project
EAA	Extra Academic Activity

Open Elective -II

Sensor Technologies for Interactive Environment
Fuzzy Sets and Applications

Departmental Elective -II

Analog CMOS VLSI Design
Computer Vision
Speech processing

Departmental Elective -IV

Satellite Communication
Microstructure Devices and Systems for Green Electronics
Signal Detection and Estimation
Radar, Sonar and Navigation Engineering
Financial Management

* To be conducted beyond office hours (Only for S.Y.BTech)

§ To be carried out in summer vacaition between 4th-5th and 6th-7th sem and to be shown in grade card of 5th and 7th sem