

Curriculum Structure

ECE Department

3rd Semester

Theory:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC-301	Electronic Devices	3	0	0	3	3
2	EC-302	Digital System Design	3	0	0	3	3
3	EC-303	Signals and Systems	3	0	0	3	3
4	EC-304	Network Theory	3	0	0	3	3
5	ES-CS-301	Data Structure & Algorithm (ES)	3	0	0	3	3
6	BS-M-301	Probability & Statistics (BS)	3	0	0	3	3
7	MC-381	Environmental Science	0	0	2	2	0
		Total of Theory				20	18

Practical / Sessional:

Sl. No.	CODE	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC-391	Electronic Devices Laboratory	0	0	2	2	1
2	EC-392	Digital System Design laboratory	0	0	2	2	1
3	ES-CS-391	Data Structure laboratory (ES)	0	0	2	2	1
		Total of Practical / Sessional				06	3
TOTAL OF SEMESTER:						26	21

4th Semester

Theory:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC-401	Analog Communication	3	0	0	3	3

2	EC-402	Analog Electronic Circuits	3	0	0	3	3
3	EC-403	Microprocessor & Microcontrollers	3	0	0	3	3
4	ES-CS-401	Design and Analysis of Algorithm (ES)	3	0	0	3	3
5	BS-M-401	Numerical Methods (BS)	2	0	0	2	2
6	BS-B-401	Biology for Engineers	2	1	0	3	3
		Total of Theory				17	17

Practical / Sessional:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC -491	Analog Communication laboratory	0	0	2	2	1
2	EC-492	Analog Electronic Circuits laboratory	0	0	2	2	1
3	EC-493	Microprocessor & Microcontrollers laboratory	0	0	2	2	1
4	BS-M(CS)-491	Numerical Methods laboratory	0	0	2	2	1
5	HS-HU-481	Soft Skill Development laboratory	0	0	2	2	1
		Total of Practical / Sessional				10	5
TOTAL OF SEMESTER:						27	22

5th Semester

Theory:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC-501	Electromagnetic Waves	3	0	0	3	3
2	EC-502	Computer Architecture	3	0	0	3	3
3	EC-503	Digital Communication & Stochastic Process	3	1	0	4	3.5
4	EC-504	Digital Signal	3	0	0	3	3

		Processing					
5	PE-EC-505A/ B/ C/ D	Nanoelectronics/ Speech and Audio Processing/ Power Electronics/ Scientific Computing	3	0	0	3	3
6	OE-EC-506A/ B/ C	Soft Skill and Interpersonal Communication/ Cyber Law & Intellectual Property Rights/ Human Resource Management	3	0	0	3	3
		Total of Theory				19	18.5

Practical / Sessional:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC-591	Electromagnetic Wave laboratory	0	0	2	2	1
2	EC-592	Digital Communication laboratory	0	0	2	2	1
3	EC-593	Digital Signal Processing laboratory	0	0	2	2	1
4	MC-HU-581	Effective Technical Communication	0	0	3	3	0
		Total of Practical / Sessional				09	3
TOTAL OF SEMESTER:						28	21.5

6th Semester

Theory:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC-601	Control System & Instrumentation	3		0	3	3
2	EC-602	Computer Network	3	0	0	3	3
3	PE-EC-603 A/ B/ C/ D	Introduction to MEMS/ Bio-Medical Electronics/ CMOS VLSI Design/	3	0	0	3	3

		Information Theory & Coding					
4	OE-EC-604 A/ B/ C	Electronic Measurements and Measuring Instruments / Operating System/ Object Oriented Programming	3	0	0	3	3
5	HS-HU-601	Economics for Engineers	3	0	0	3	3
6	MC-681	Universal Human Values	2	0	0	2	0
		Total of Theory				17	15

Practical / Sessional:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC-691	Control System and Instrumentation Laboratory	0	0	2	2	1
2	EC-692	Computer Network Laboratory	0	0	2	2	1
3	EC-681	Mini Project/ Electronic Design Workshop	0	0	4	4	2
		Total of Practical / Sessional				08	04
TOTAL OF SEMESTER:						25	19

7th Semester

Theory:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	PE-EC-701 A/ B/ C	Microwave Theory and Techniques/ Satellite Communication / Mobile Communication and Networks	3	0	0	3	3

2	PE-EC-702 A/ B/ C	Adaptive Signal Processing/ Digital Image and Video Processing/ Neural Network and Fuzzy Logic Control	3	0	0	3	3
3	PE-EC-703 A/ B/ C	Embedded System/ Wireless Sensor Networks/ Wavelet Transforms	3	0	0	3	3
4	PE-EC-704 A/ B/ C	Web Technology/ Optimisation Technique/ Entrepreneurship	3		0	3	3
5	HS- HU-701	Principles of Management	2	0	0	2	2
		Total of Theory				14	14

Practical / Sessional:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC-781	Industrial Training	During Semester Break (6 th & 7 th)				1
2	EC-782	Project stage-I	0	0	8	8	4
		Total of Practical / Sessional				08	05
TOTAL OF SEMESTER:						22	19

8th Semester

Theory:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	PE-EC-801 A/ B/ C	Antennas and Propagation/ Fiber Optic Communication/ Error Correcting Codes.	3	0	0	3	3
2	PE-EC-802 A/ B/ C	Mixed Signal Design/ Industrial Automation and Control/ VLSI Design Automation	3	0	0	3	3

3	OE-EC-803 A/ B/ C	Internet of Things (IoT)/ Big Data Analysis/ Cyber Security	3	0	0	3	3
4	OE-EC-804 A/ B/ C	Artificial Intelligence/ Microwave Integrated Circuits/ Organizational Behavior	3	0	0	3	3
		Total of Theory				12	12

Practical / Sessional:

Sl. No.	Code	Paper	Contact periods Per week			Total Contact Hrs	Credits
			L	T	P		
1	EC-881	Project stage-II	0	0	15	15	7.5
2	EC-882	Grand Viva	0	0	0	0	1.5
		Total of Practical / Sessional				15	09
TOTAL OF SEMESTER:						27	21