

## COURSE CONTENT *for Electronics & Communication Engineering [ECE]*

1st Semester							
A. Theory							
Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	HU 101	English Language & Communication	2	1	0	3	3
2	PH 101	Engineering Physics	3	1	0	4	4
3	M 101	Mathematics	3	1	0	4	4
4	ME 101	Mechanical Sciences	3	1	0	4	4
5	EE 101	Basic Electrical Engineering	3	1	0	4	4
6	CH 101	Environment & Ecology	3	0	0	3	3
Total Theory						22	22
B. Practical							
7	PH 191	Engineering Physics Lab	0	0	3	3	2
8	EE 191	Electrical Engineering Lab	0	0	3	3	2
9	ME 191	Engineering Graphics	0	0	3	3	2
10	ME 192	Workshop Practical	0	0	3	3	2
Total Practical						12	8
Total of Semester						34	30

## 2nd Semester

### A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	PH 201	Engineering Physics	4	0	0	4	4
2	M 201	Mathematics	3	1	0	4	4
3	ME 201	Mechanical Sciences	3	0	0	3	3
4	CS 201	Introduction to Computing	2	1	0	3	3
5	EC 201	Basic Electrical Engineering	3	1	0	4	4
6	CH 201	Engineering Chemistry	3	0	0	3	3
Total Theory						21	21
B. Practical							
7	PH 291	Engineering Physics Lab	0	0	3/2	3/2	1
8	CH 291	Engineering Chemistry Lab	0	0	3/2	3/2	2
9	CS 291	Computing Lab	0	0	3	3	2
10	EC 291	Electronics Engineering Lab	0	0	3	3	2
11	ME 291	Engineering Graphics	0	0	3	3	2
12	ME 292	Workshop Practical	0	0	3	3	2
Total Practical						15	10
Total of Semester						36	31

## 3rd Semester

### A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	M 302	Mathematics	3	1	0	4	4
2	EE 301	Circuit Theory & Networks	3	1	0	4	4
3	EC 301	Solid State Devices	3	0	0	3	3
4	CS 302	Data Structure & Algorithms	3	1	0	4	4
5	M(CS) 312	Numerical Methods & Programming	3	0	0	3	3
6	EI 302	Electronic Measurement & Instrumentation	3	1	0	4	4
Total Theory						22	22
B. Practical							
7	EE 391	Circuit & Network Lab	0	0	3	3	2
8	CS 382	Data Structure & Programming Lab	0	0	6	6	4
9	EI 382	Electronic Measurement & Instrumentation	0	0	3	3	2
Total Practical						15	8
Total of Semester						37	30

## 4th Semester

### A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	EC 401	Analog Electronic Circuits	3	1	0	4	4
2	EC 402	Digital Electronic Circuits	3	1	0	4	4
3	EC 403	Analog Communication	3	1	0	4	4
4	EC 404	Electromagnetic waves & radiating Systems	3	1	0	4	4
5	EC 405	Micro electronic & Opto electronic devices	3	1	0	4	4
Total Theory						20	20
B. Practical							
6	EC 491	Analog Electronic Circuits Lab	0	0	3	3	2
7	EC 492	Digital Electronic Lab	0	0	3	3	2
8	EC 493	Prop. & Antenna Lab	0	0	3	3	2
9	EC 494	Analog Communication Lab	0	0	3	3	2
Total Practical						12	8
C. Sessional							
10	HU481	Technical Report writing & / Language Practice Lab	0	0	0	3	2
Total of Semester						35	30

## 5th Semester

### A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	EC-501	Telecommunication System	3	1	0	4	4
2	EC-502	Digital Communication	3	1	0	4	4
3	EC-503	Computer Architecture & Organization	3	1	0	4	4
4	EC-513	Control System	3	1	0	4	4
5	EI(ECE) 502	Microprocessor & Microcontroller	3	1	0	4	4
Total Theory						20	20

## 6th Semester

### A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	HU-601	Industrial Management	3	0	0	3	3
2	EC-601	Digital Signal Processing	3	1	0	4	4
3	EC-602	Computer Communication & Networking	3	1	0	4	4
4	EC-603	Power Electronics	3	1	0	4	4
5	EC-604	VLSI Circuits & Systems	3	1	0	4	4
Total Theory						19	19

### B. Practical

6	EC-691	Digital Signal Processing Lab	0	0	3	3	2
7	EC-694	VLSI Circuits & Systems Lab	0	0	3	3	2
Total Practical						6	4

### C. Sessional

8	EC-682	Seminar-I	0	0	3	3	2
9	EC-683	Electronic Circuit Design Lab	0	0	5	5	4
Total of Sessionals						8	6
Total of Semester						33	29

### B. Practical

6	EC-592	Digital Communication Lab	0	0	3	3	2
7	EC-583	Control System lab	0	0	3	3	2
8	EI(ECE) 592	Microprocessor & Microcontroller Lab	0	0	3	3	2
Total Practical						9	6
Total of Semester						29	26

## 7th Semester

### A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	EC-701	RF & Microwave Engineering	3	1	0	4	4
2	EC-702	EDA for VLSI Design	3	1	0	4	4
3	EC-703	Coding & Information Theory	3	1	0	4	4
4	EC-704	Elective-I	3	0	0	3	3
Total Theory						15	15

### B. Practical

5	EC-791	Microwave Engineering Lab	0	0	3	3	3
6	EC-792	EDA Lab	0	0	3	3	3
Total Practical						6	6

### C. Sessional

7	EC-783	Project-I	0	0	3	3	2
8	EC-784	Group discussion	0	0	3	3	4
Total of Sessionals						6	6
Total of Semester						27	27

## Elective-I

Sl. No.	Course Code	Topic
1	EC-704A	System Programming & Operating System
2	EC-704B	Advanced Engineering Mathematics for Electronic Engineers
3	EC-704C	Database Management System
4	EC-704D	Process Control Engineering
5	EC-704E	Pattern Recognition & Machine Intelligence
6	EC-704F	Telecommunication Network Management