

**Curriculum structure semester wise**  
Electronics & Communication Engineering

SEMESTER-I

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
<b>Theory</b>			L	T	P	TA	CT	TOT	ESE	Sub Total		
1	HU 1101	Professional communication in English	3	1	0	20	10	30	70	100	4	4
2	CH 1101	Engineering Chemistry-I	3	1	0	20	10	30	70	100	4	4
3	PH 1101	Engineering Physics-I	3	1	0	20	10	30	70	100	4	4
4	MA 1101	Mathematics-I	3	1	0	20	10	30	70	100	4	4
5	ME 1101	Engineering Mechanics	3	1	0	20	10	30	70	100	4	4
6	EE 1101	Basic Electrical Engineering	3	1	0	20	10	30	70	100	4	4
<b>Total</b>										600	24	24
<b>Sessionals</b>												
1	CH 1201 PH 1201	Chemistry Lab / Physics Lab	0	0	3	30	-	30	20	50	2 (1+1)	3
2	ME 1201 EE 1201	Engineering Mechanics Lab/ Electrical Engineering Lab	0	0	3	30	-	30	20	50	2 (1+1)	3
3	ME 1202	Engineering Graphics-I	0	0	3	30	-	30	20	50	2	3
4	ME 1203	Work Shop Practice-I	0	0	3	30	-	30	20	50	2	3
5	EC 1301	General Proficiency	-	-	-	-	-	-	-	50	1	-
<b>Total</b>										250	9	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 24+9=33

Total Marks 600+250=850

Total Hours 24+12=36

(Rest 6 hours is to be utilized for co-curricular development)

## SEMESTER-II

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
<b>Theory</b>												
1	IT 2101	Programming language (C++)	3	1	0	20	10	30	70	100	4	4
2	CH 2102	Environment and ecology	3	1	0	20	10	30	70	100	4	4
3	PH 2102	Engineering Physics-II	3	1	0	20	10	30	70	100	4	4
4	MA 2102	Mathematics-II	3	1	0	20	10	30	70	100	4	4
5	ME 2102	Engineering Thermodynamics	3	1	0	20	10	30	70	100	4	4
6	EC 2101	Basic Electronics	3	1	0	20	10	30	70	100	4	4
<b>Total</b>										600	24	24
<b>Sessionals</b>												
1	EC 2201	Basic Electronics Lab	0	0	3	30	-	30	20	50	2	3
2	IT 2201	Computer Programming Lab	0	0	3	30	-	30	20	50	2	3
3	ME 2204	Engineering Graphics-II	0	0	3	30	-	30	20	50	2	3
4	ME 2205	Work Shop Practice-II	0	0	3	30	-	30	20	50	2	3
5	EC 2302	General Proficiency	-	-	-	-	-	-	-	50	1	-
<b>Total</b>										250	9	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 24+9=33      Total Marks 600+250=850

Total Hours 24+12=36

(Rest 6 hours is to be utilized for co-curricular development)

**SEMESTER-III**

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
<b>Theory</b>												
1	MA 3103	Numerical analysis & Programming	3	1	0	20	10	30	70	100	4	4
2	PH 3103	Material Science (B)	3	1	0	20	10	30	70	100	4	4
3	MA 3104	Mathematics-III	3	1	0	20	10	30	70	100	4	4
4	EE 3103	Network Theory	3	1	0	20	10	30	70	100	4	4
5	CS 3101	Data Structure	3	1	0	20	10	30	70	100	4	4
6	EC 3102	Digital Electronics & Integrated Circuits	3	1	0	20	10	30	70	100	4	4
Total										600	24	24
<b>Sessionals</b>												
1	MA 3201	Numerical Analysis & Programming Lab	0	0	3	30	-	30	20	50	2	3
2	EE 3203	Network Theory Lab	0	0	3	30	-	30	20	50	2	3
3	EC 3202	Digital Electronics Lab	0	0	3	30	-	30	20	50	2	3
4	CS 3201	Data Structure Lab	0	0	3	30	-	30	20	50	2	3
5	EC 3303	General Proficiency	-	-	-	-	-	-	-	50	1	-
Total										250	9	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 24+9=33

Total Marks 600+250=850

Total Hours 24+12=36

(Rest 6 hours is to be utilized for co-curricular development)

SEMESTER-IV

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
<b>Theory</b>												
1	MA 4105	Mathematics-IV	3	1	0	20	10	30	70	100	4	4
2	MA 4106	Probability & Statistics	3	1	0	20	10	30	70	100	4	4
3	EC 4103	Analog Electronics	3	1	0	20	10	30	70	100	4	4
4	EE 4105	Instrumentation I	3	1	0	20	10	30	70	100	4	4
5	EC 4104	Communication System & Engg.	3	1	0	20	10	30	70	100	4	4
6	EE 4107	Microprocessor & Interfacing	3	1	0	20	10	30	70	100	4	4
Total										600	24	24
<b>Sessionals</b>												
1	EC 4203	Analog Electronics Lab	0	0	3	30	-	30	20	50	2	3
2	EC 4204	Communication Engg. Lab	0	0	3	30	-	30	20	50	2	3
3	EE 4206	Microprocessor Lab	0	0	3	30	-	30	20	50	2	3
4	EE 4205	Instrumentation Lab	0	0	3	30	-	30	20	50	2	3
5	EC 4304	General Proficiency	-	-	-	-	-	-	-	50	1	-
Total										250	9	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 24+9=33      Total Marks 600+250=850

Total Hours 24+12=36

(Rest 6 hours is to be utilized for co-curricular development)

SEMESTER-V

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
<b>Theory</b>												
1	PH 5104	Electromagnetic Field Theory (EMF)	3	1	0	20	10	30	70	100	4	4
2	EC 5105	Telecommunication switching systems & networks	3	1	0	20	10	30	70	100	4	4
3	EC 5106	Semiconductor devices	3	1	0	20	10	30	70	100	4	4
4	CS 5106	Computer Organization & Architecture	3	1	0	20	10	30	70	100	4	4
5	EE 5113	Linear & Digital Control Systems	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
<b>Sessionals</b>												
1	EC 5205	Telecommunication switching Lab	0	0	3	30	-	30	20	50	2	3
2	EC 5206	Semiconductor devices	0	0	3	30	-	30	20	50	2	3
3	EE 5212	Control Lab	0	0	3	30	-	30	20	50	2	3
4	CS 5206	C.O. Lab	0	0	3	30	-	30	20	50	2	3
5	EC 5305	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

SEMESTER-VI

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
<b>Theory</b>			L	T	P	TA	CT	TOT	ESE	Sub Total		
1	ME 6123	Industrial Management	3	1	0	20	10	30	70	100	4	4
2	EC 6107	Antenna Engg.	3	1	0	20	10	30	70	100	4	4
3	EC 6108	Microwaves Engineering	3	1	0	20	10	30	70	100	4	4
4	EC 6109	Digital Communication system	3	1	0	20	10	30	70	100	4	4
5	IT 6103	Computer Networks	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
<b>Sessionals</b>												
1	EC 5207	Digital Communication Lab	0	0	3	30	-	30	20	50	2	3
2	EC 5208	Microwaves Engineering Lab	0	0	3	30	-	30	20	50	2	3
3	IT 6203	Computer Network Lab	0	0	3	30	-	30	20	50	2	3
4	EC 5209	GD/Seminars Through IT Tours	0	0	3	30	-	30	20	50	2	3
5	EC 6306	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

**SEMESTER-VII**

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
<b>Theory</b>												
1		Elective-I	3	1	0	20	10	30	70	100	4	4
2		Elective-II	3	1	0	20	10	30	70	100	4	4
3	EC 7110	Digital Signal Processing	3	1	0	20	10	30	70	100	4	4
4	EC 7111	VLSI Design	3	1	0	20	10	30	70	100	4	4
5	CS 7117	System programming & OS	3	1	0	20	10	30	70	100	4	4
<b>Total</b>										500	20	20
<b>Sessionals</b>												
1	EC 7210	Digital Signal Processing Lab	0	0	3	30	-	30	20	50	2	3
2	EC 7211	VLSI Lab	0	0	3	30	-	30	20	50	2	3
3	EC 7212	Tour, Training & Colloquium	0	0	3	30	-	30	20	50	2	3
4	EC 7213	Project Part-I	0	0	3	30	-	30	20	50	2	3
5	EC 7307	General Proficiency	-	-	-	-	-	-	-	50	2	-
<b>Total</b>										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

**ELECTIVE-I & II**

DATABASE MANAGEMENT SYSTEMS (CS 5104)

MULTIMEDIA ENGINEERING (IT 7107)

WIRELESS COMMUNICATION (EC 7112)

REAL TIME & EMBEDDED SYSTEM (EC 7113)

MODELING & SIMULATION(CS 7113)

COMPUTER VISION (CS 7118)

WEB TECHNOLOGY (CS 7112)

ARTIFICIAL INTELLIGENCE & EXPERT SYSTEM (CS 7111)

ROBOTICS (EC 7114)

### SEMESTER-VIII

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
<b>Theory</b>												
1		Elective-III	3	1	0	20	10	30	70	100	4	4
2		Elective-IV	3	1	0	20	10	30	70	100	4	4
3		Elective-V	3	1	0	20	10	30	70	100	4	4
4	EC 8118	Optical Fibre Communication	3	1	0	20	10	30	70	100	4	4
5	EE 8152	Power Electronics	3	1	0	20	10	30	70	100	4	4
<b>Total</b>										500	20	20
<b>Sessionals</b>												
1	EC 8214	Project part-II	0	0	12	-	-	120	80	200	8	12
2	EC 8308	General Proficiency	-	-	-	-	-	-	-	50	2	-
<b>Total</b>										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

#### **ELECTIVES III, IV & V**

INTERNET TECHNOLOGY (IT 7108)

DIGITAL IMAGE PROCESSING (EC 7115)

MOBILE COMMUNICATION (EC 8119)

BIOMEDICAL ELECTRONICS (EC 8121)

VALUES & ETHICS OF PROFESSION (IT 6105)

SOFTWARE ENGINEERING (CS 4102)

SOFT COMPUTING (CS 6109)

CRYPTOGRAPHY (EC 8120)

SATELLITE COMMUNICATIONS (EC 8122)

ENTERPRISE RESOURCE PLANNING (EC 8124)