



#### Semester - 1

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303104105	Environmental Science	0	1	0	0	-	-	50	-	-	20	-	50
303105106	Information and Communication Technology	3	3	0	0	20	-	20	60	-	40	-	100
303106101	Basic Electrical Engineering	4	3	2	0	20	20	20	60	30	40	25	150
303109101	Engineering Graphics	4	2	4	0	20	20	20	60	30	40	25	150
303191101	Mathematics-I	4	4	-	-	20	-	20	60	-	40	-	100
303192102	Engineering Physics-II	4	3	2	0	20	20	20	60	30	40	25	150
303193103	Communication Skills	2	-	-	2	-	-	100	-	-	40	-	100
	Total	21	16	8	2								800

**Lect** - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical  
**Theory Passing % : 40 Practical Passing % : 50**



#### Semester - 2

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303105102	Programming for Problem Solving	4	3	2	0	20	20	20	60	30	40	25	150
303107151	Basic Electronics	4	3	2	0	20	20	20	60	30	40	25	150
303107153	Electronic Workshop	1	0	2	0	-	50	-	-	50	-	50	100
303109102	Elements of Mechanical Engineering	4	3	2	0	20	20	20	60	30	40	25	150
303191151	Mathematics-II	4	4	-	-	20	-	20	60	-	40	-	100
303193152	Advanced Communication & Technical Writing	2	-	-	2	-	-	100	-	-	40	-	100
	Total	19	13	8	2								750

**Lect** - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical  
**Theory Passing % : 40 Practical Passing % : 50**



Semester - 3

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107201	Electronic Devices	3	3	0	0	20	-	20	60	-	40	-	100
303107202	Electronic Devices Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107203	Digital System Design	3	3	0	0	20	-	20	60	-	40	-	100
303107204	Digital System Design Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107205	Network Theory	3	3	0	0	20	-	20	60	-	40	-	100
303107206	Network Theory Lab	1	0	2	0	-	30	20	-	30	-	25	50
303107207	Signals and Systems	3	3	0	0	20	-	20	60	-	40	-	100
303107208	Signal and System LAB	1	0	2	0	-	20	-	-	30	-	25	50
303107209	Product Realization	1	0	2	0	-	20	-	-	30	-	25	50
303191203	Mathematics III	4	4	-	-	20	-	20	60	-	40	-	100
303193203	Professional Communication Skills	2	-	-	2	-	-	100	-	-	40	-	100
	Total	23	16	10	2								850

Lect - Lecture, Tut - Tutorial, Lab - Lab, T - Theory, P - Practical, CE - CE, T - Theory, P - Practical  
Theory Passing % : 40 Practical Passing % : 50



Semester - 4

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107251	Analog Communication	3	3	0	0	20	-	20	60	-	40	-	100
303107252	Analog Communication Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107253	Analog Circuits	3	3	0	0	20	-	20	60	-	40	-	100
303107254	Analog Circuits Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107255	Microcontrollers	3	3	0	0	20	-	20	60	-	40	-	100
303107256	Microcontroller Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107257	Control System	3	3	0	0	20	-	20	60	-	40	-	100
303107258	Control System Lab	1	-	2	-	-	20	-	-	30	-	25	50
303107259	Probability Theory and Stochastic Processes	3	3	0	0	20	-	20	60	-	40	-	100
303107260	Probability Theory and Stochastic Processes LAB	1	-	2	-	-	20	-	-	30	-	25	50
303193252	Professional Grooming and Personality Development	1	-	-	1	-	-	100	-	-	40	-	100
	Total	21	15	10	1								850

Lect - Lecture, Tut - Tutorial, Lab - Lab, T - Theory, P - Practical, CE - CE, T - Theory, P - Practical  
Theory Passing % : 40 Practical Passing % : 50

Semester - 5

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107301	Electromagnetic waves	3	3	0	0	20	-	20	60	-	40	-	100
303107302	Electromagnetic Waves Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107303	Computer Architecture	3	3	0	0	20	-	20	60	-	40	-	100
303107304	Computer Architecture Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107308	Simulation Design Techniques	1	0	2	0	-	40	-	-	60	-	50	100
303107309	Digital Communication	3	3	-	-	-	-	-	60	-	40	-	100
303107310	Digital Communication Lab	1	-	2	-	-	-	-	-	30	-	25	50
303107311	Summer Internship - I	2	-	-	-	-	100	-	-	-	-	50	100
303193304	Professionalism & Corporate Ethics	1	-	-	1	-	-	100	-	-	40	-	100
	Open Elective 01	2	-	-	-	-	-	-	-	-	-	-	
	PEC 01-LAB	1	-	-	-	-	-	-	-	-	-	-	
	PEC 01	3	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	<b>22</b>	<b>9</b>	<b>8</b>	<b>1</b>								<b>750</b>

Semester - 5 : Open Elective 01

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303105304	Cyber Security	2	2	0	0	20	-	20	60	-	40	-	100
303109346	Renewable Energy Sources	2	2	0	0	20	-	20	60	-	40	-	100



Semester - 5 : PEC 01-LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107332	Power Electronics Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107334	Introduction to MEMS Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107336	Scientific Computing Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107338	PLC & SCADA Lab	1	0	2	0	-	20	-	-	30	-	25	50

Semester - 5 : PEC 01

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107331	Power Electronics	3	3	0	0	20	-	20	60	-	40	-	100
303107333	Introduction to MEMS	3	3	0	0	20	-	20	60	-	40	-	100
303107335	Scientific computing	3	3	0	0	20	-	20	60	-	40	-	100
303107337	PLC & SCADA	3	3	0	0	20	-	20	60	-	40	-	100

**Lect** - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical  
**Theory Passing % : 40 Practical Passing % : 50**



Semester - 6

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107351	VLSI	3	3	0	0	20	-	20	60	-	40	-	100
303107352	VLSI Lab	1	-	2	-	-	20	-	-	30	-	25	50
303107353	Computer Network	3	3	0	0	20	-	20	60	-	40	-	100
303107354	Computer Network Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107355	Digital Signal Processing	3	3	0	0	20	-	20	60	-	40	-	100
303107356	Digital Signal Processing Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107360	Electronics Design Lab	1	0	2	0	-	20	-	-	30	-	25	50
303193353	Employability Skills	1	-	-	1	-	-	100	-	-	40	-	100
	Open Elective 02	2	-	-	-	-	-	-	-	-	-	-	
	PEC 02	3	-	-	-	-	-	-	-	-	-	-	
	PEC 02-LAB	1	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	<b>20</b>	<b>9</b>	<b>8</b>	<b>1</b>								<b>600</b>

Semester - 6 : Open Elective 02

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303100351	Innovation and Entrepreneurship	2	2	-	-	60	-	40	-	-	40	-	100
303100354	Constitution of India	2	2	-	-	60	-	40	-	-	40	-	100



Semester - 6 : PEC 02

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107381	Nano electronics	3	3	0	0	20	-	20	60	-	40	-	100
303107385	Bio Medical Electronics	3	3	0	0	20	-	20	60	-	40	-	100
303107387	Industrial Instrumentation	3	3	0	0	20	-	20	60	-	40	-	100
303107389	Computer Network	3	3	-	-	20	-	20	60	-	40	-	100

Semester - 6 : PEC 02-LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107382	Nano Electronics Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107386	Bio Medical Electronics Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107388	Industrial Instrumentation Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107390	Computer Network Lab	1	-	2	-	-	20	-	-	30	-	25	50

**Lect** - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical  
**Theory Passing % : 40 Practical Passing % : 50**



Semester - 7

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107401	Project-1	5	0	10	0	-	100	-	-	100	-	100	200
303107402	Summer Internship - II	2	-	-	-	-	100	-	-	-	-	50	100
	Open Elective 04	3	-	-	-	-	-	-	-	-	-	-	
	PEC 03	3	-	-	-	-	-	-	-	-	-	-	
	PEC 03-LAB	1	-	-	-	-	-	-	-	-	-	-	
	PEC 04	3	-	-	-	-	-	-	-	-	-	-	
	PEC 04-LAB	1	-	-	-	-	-	-	-	-	-	-	
	PEC 05	3	-	-	-	-	-	-	-	-	-	-	
	PEC 05-LAB	1	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	<b>22</b>	<b>0</b>	<b>10</b>	<b>0</b>								<b>300</b>

Semester - 7 : Open Elective 04

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107441	Wavelet Transforms	3	3	-	-	20	-	20	60	-	40	-	100
303107443	Audio & Vedio	3	3	-	-	20	-	20	60	-	40	-	100
303107445	Radar & Navigation Systems	3	3	-	-	20	-	20	60	-	40	-	100
303107447	Operations Research	3	3	-	-	20	-	20	60	-	40	-	100

Semester - 7 : PEC 03

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107411	Adaptive signal processing	3	3	0	0	20	-	20	60	-	40	-	100
303107413	Speech and Audio Processing	3	3	0	0	20	-	20	60	-	40	-	100
303107415	Error Correcting Codes	3	3	0	0	20	-	20	60	-	40	-	100
303107427	Antennas and Propagation	3	3	0	0	20	-	20	60	-	40	-	100

Semester - 7 : PEC 03-LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107412	Adaptive Signal Processing Lab	1	-	2	-	-	20	-	-	30	-	25	50
303107414	Speech and Audio Processing Lab	1	-	2	-	-	20	-	-	30	-	25	50
303107416	Error Correcting Codes Lab	1	-	2	-	-	20	-	-	30	-	25	50
303107428	Antennas and Propagation Lab	1	-	2	-	-	20	-	-	30	-	25	50

Semester - 7 : PEC 04

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107417	Microwave Theory and Techniques	3	3	0	0	20	-	20	60	-	40	-	100
303107419	Mixed Signal Design	3	3	0	0	20	-	20	60	-	40	-	100



Semester - 7 : PEC 04

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107421	Mobile Communication Network	3	3	0	0	20	-	20	60	-	40	-	100

Semester - 7 : PEC 04-LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107418	Microwave Theory and Techniques Lab	1	-	2	-	-	20	-	-	30	-	25	50
303107420	Mixed Signal Design Lab	1	-	2	-	-	20	-	-	30	-	25	50
303107422	Mobile Communication Network Lab	1	-	2	-	-	20	-	-	30	-	25	50

Semester - 7 : PEC 05

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107423	Satellite Communication	3	3	0	0	20	-	20	60	-	40	-	100
303107425	Fiber optic Communications	3	3	0	0	20	-	20	60	-	40	-	100
303107429	Embedded System	3	3	0	0	20	-	20	60	-	40	-	100



Semester - 7 : PEC 05-LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107424	Satellite Communication LAB	1	0	2	0	-	20	-	-	30	-	25	50
303107426	Fiber optic Communications Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107430	Embedded System Lab	1	0	2	0	-	20	-	-	30	-	25	50

**Lect** - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical  
**Theory Passing % : 40 Practical Passing % : 50**



Semester - 8

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107451	Project-II	5	0	10	0	-	100	-	-	100	-	100	200
	Open Elective 05	3	-	-	-	-	-	-	-	-	-	-	
	Open Elective 06	3	-	-	-	-	-	-	-	-	-	-	
	PEC 06	3	-	-	-	-	-	-	-	-	-	-	
	PEC 06-LAB	1	-	-	-	-	-	-	-	-	-	-	
	PEC 07	3	-	-	-	-	-	-	-	-	-	-	
	PEC 07-LAB	1	-	-	-	-	-	-	-	-	-	-	
	<b>Total</b>	<b>19</b>	<b>0</b>	<b>10</b>	<b>0</b>								<b>200</b>

Semester - 8 : Open Elective 05

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107481	Big data Analysis	3	3	0	0	20	-	20	60	-	40	-	100
303107483	Modern Manufacturing Processes	3	3	0	0	20	-	20	60	-	40	-	100
303107485	Spread Spectrum Techniques	3	3	0	0	20	-	20	60	-	40	-	100

Semester - 8 : Open Elective 06

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107487	Python For Hardware Programming	3	3	0	0	20	-	20	60	-	40	-	100
303107489	Digital Design Using Verilog	3	3	0	0	20	-	20	60	-	40	-	100

Semester - 8 : PEC 06

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107461	Digital Image & Video Processing	3	3	0	0	20	-	20	60	-	40	-	100
303107463	Internet of Things	3	3	0	0	20	-	20	60	-	40	-	100
303107465	High Speed Electronics	3	3	0	0	20	-	20	60	-	40	-	100

Semester - 8 : PEC 06-LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107462	Digital Image & Video Processing lab	1	0	2	0	-	30	-	-	30	-	25	50
303107464	Internet of things Lab	1	0	2	0	-	30	-	-	30	-	25	50
303107466	High Speed Electronics Lab	1	0	2	0	-	20	-	-	30	-	25	50

**Semester - 8 : PEC 07**

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107467	Wireless Sensor Network	3	3	0	0	20	-	20	60	-	40	-	100
303107469	Modern Digital Communication System	3	3	0	0	20	-	20	60	-	40	-	100
303107471	Artificial Intelligence	3	3	0	0	20	-	20	60	-	40	-	100

**Semester - 8 : PEC 07-LAB**

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303107468	Wireless Sensor Network Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107470	Modern Digital Communication Systems Lab	1	0	2	0	-	20	-	-	30	-	25	50
303107472	Artificial Intelligence Lab	1	0	2	0	-	20	-	-	30	-	25	50

**Lect** - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical  
**Theory Passing % : 40 Practical Passing % : 50**