

Shri G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE
BTech II Year ((Electronics and Telecommunication Engineering))

(NEP - 2020)

Semester : III														
S.No.	Subject Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks				Total Marks	Total Credits
				L	T	P	T	P	Theory		Practical			
									Th.	CW	Pr.	SW		
1	BSC	MA25014	Mathematics - III	3	1	-	4	-	70	30	-	-	100	4
2	PCC	EC25006	Electronic Devices	3	-	-	3	-	70	30	-	-	100	3
3	PCC	EC25007	Signal and Systems for Communication	3	1	-	4	-	70	30	-	-	100	4
4	PCC	EE25024	Network Theory and Analysis	3	-	-	3	-	70	30	-	-	100	3
5	PCC	EC25008	Digital system design	3	-	-	3	-	70	30	-	-	100	3
6	HSMC	HU25005	Economics for Engineers	3	-	-	3	-	70	30	-	-	100	3
7	PCC	EC25401	Electronic Devices Lab	-	-	2	-	1	-	-	60	40	100	1
8	PCC	EE25402	Network Theory and Analysis Lab	-	-	2	-	1	-	-	60	40	100	1
9	PCC	EC25403	Digital System Design Lab	-	-	2	-	1	-	-	60	40	100	1
10	MC	ECM2002	Environmental Science*	2	-	-	-	-	-	50			50	0
			Total	20	2	6	20	3	420	230	180	120	950	23

* Mandatory non credit course

Semester : IV														
S.No.	Subject Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks				Total Credits	
				L	T	P	T	P	Theory		Practical			
									Th.	CW	Pr.	SW		
1	BSC	MA25563	Mathematics IV	3	1	-	4	-	70	30	-	-	100	4
2	PCC	EC25564	Electromagnetics waves	3	-	-	3	-	70	30	-	-	100	3
3	PCC	EC25515	Analog Electronics	3	-	-	3	-	70	30	-	-	100	3
4	PCC	EC25511	Microprocessors and Microcontroller	3	1	-	4	-	70	30	-	-	100	4
5	PCC	EC25502	Communication Systems	3	-	-	3	-	70	30	-	-	100	3
6	PCC	EC25801	Analog Electronics Lab	-	-	2	-	1	-	-	60	40	100	1
7	PCC	EC25803	Microprocessors and Microcontroller Lab	-	-	2	-	1	-	-	60	40	100	1
8	PCC	EC25804	Communication Systems Lab	-	-	2	-	1	-	-	60	40	100	1
9	PCC	EC25569	Electronics workshop	-	-	2	-	1	-	-	60	40	100	1
10	HSMC	HU25881	Values, Humanities and Professional Ethics	-	2	-	2	-	-	100	-	-	100	2
11	MC	HUM2051	Constitution of India*	2	-		-	-	-	50			50	0
			Total	17	4	8	19	4	350	300	240	160	1050	23
* Mandatory non credit course														

** 2 weeks training/Internship-I during semester break after IV sem is mandatory.

Diploma in Electronics and Telecommunication Engineering shall be awarded after acquiring additional 10 credits out of which 6 credits will be awarded for 3 month industrial training within 5 years and 4 credits will be awarded for the project submitted within due time.

Shri G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE
BTech III YEAR ((Electronics and Telecommunication Engineering))

(NEP - 2020)

Semester : V														
S.No.	Subject Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks				Total Marks	Total Credits
				L	T	P	T	P	Theory		Practical			
									Th.	CW	Pr.	SW		
1	PCC	EC35002	Mobile Communication	3	1	-	4	-	70	30	-	-	100	4
2	PCC	EC35003	Antenna and Wave Propagation	3	-	-	3	-	70	30	-	-	100	3
3	PCC	EC35012	VLSI Design	3	-	-	3	-	70	30	-	-	100	3
4	OEC		Open Elective - I	3	1	-	4	-	70	30	-	-	100	4
5	PEC		Program Elective Course - I	3	-	-	3	-	70	30	-	-	100	3
6	PCC	EC35401	Antenna and Wave Propagation Lab	-	-	2	-	1	-	-	60	40	100	1
7	PCC	EC35402	VLSI Design Lab	-	-	2	-	1	-	-	60	40	100	1
8	PCC	EC35231/EE35232	Program Elective - I Lab	-	-	2	-	1	-	-	60	40	100	1
9	PCC	EC35403	Electronics measurement Lab	-	-	2	-	1	-	-	60	40	100	1
10	INT	EC35883	Industrial Training*/ Internship - I Evaluation	-	0	0	-	2	-	-	-	100	100	2
11	MC	HUM3501	Essence of Indian Knowledge Tradition*	2	-		-	-	-	50			50	0
			Total	17	2	8	17	6	350	200	240	260	1050	23
* Mandatory non credit course														
Semester : VI														
S.No.	Subject Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks				Total Marks	Total Credits
				L	T	P	T	P	Theory		Practical			
									Th.	CW	Pr.	SW		
1	PCC	EC35501	Digital Signal Processing	3	1	-	4	-	70	30	-	-	100	4
2	PCC	EC35502	Cellular and Wireless Networks	3	-	-	3	-	70	30	-	-	100	3
3	PCC	EC35523	Computer Networks	3	-	-	3	-	70	30	-	-	100	3
4	PEC		Program Elective Course - II	3	-	-	3	-	70	30	-	-	100	3
5	PEC		Program Elective Course - III	3	-	-	3	-	70	30	-	-	100	3
6	PCC	EC35801	Digital Signal Processing Lab	-	-	2	-	1	-	-	60	40	100	1
7	PCC	EC35802	Computer Networks Lab	-	-	2	-	1	-	-	60	40	100	1
8	PCC	EC35882	Electronics Design and Simulation Workshop	-	-	2	-	1	-	-	60	40	100	1
10	PRO	EC35998	Minor Project	-	-	8	-	4	-	-	60	40	100	4
			Total	15	1	14	16	7	350	150	240	160	900	23
* Mandatory non credit course														
** 2 weeks training/Internship-II during semester break after VI sem is mandatory.														

Vacational Degree in Electronics and Telecommunication Engineering shall be awarded after acquiring additional 10 credits out of which 6 credits will be awarded for 3 month industrial training within 5 years and 4 credits will be awarded for the project submitted within due time.

Shri G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE
B.Tech. (Electronics and Telecommunication Engineering)

Program Elective – I			
1	PEC-I	EC35201	Embedded System
2	PEC-I	EE35202	Control Systems

Open Program Elective -1 (Offered by others department to EC students)		
OEC-1	EIO5001	Digital Design using HDL
OEC-1	ITO5001	Data Structure and Algorithm

Program Elective – II			
1	PEC-II		Satellite and Radar Communication
2	PEC-II		Random Signal and Stochastics Processes
3	PEC-II		Artificial Intelligence-Machine Learning
4	PEC-II		NPTEL/SWAYAM online course on " GPU Architectures and Programming "

Open Program Elective (Offered by EC Department to other branch students)		
OEC-1	Code 1	Satellite and Radar Communication
OEC-1	Code 2	Wireless Communication Networks

Program Elective – III			
1	PEC-III		Data Science
2	PEC-III		VLSI Technology
3	PEC-III		Digital Image Processing
4	PEC-III		NPTEL/SWAYAM online course on " Spread Spectrum Communications and Jamming"

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
IV B.Tech.(4YDC) ELECTRONICS & TELECOMMUNICATIONS ENGINEERING

SEMESTER - VII

S.No.	Subject Category	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
				L	T	P			Th.	CW	SW	Pr.	Total
1	PCC	EC45009	Wireless and Mobile Networks	3	-	-	3	-	70	30	-	-	100
2	PEC-3		Program Elective-III	3	-	2	3	1	70	30	40	60	200
3	PEC-4		Program Elective-IV	3	-	-	3	-	70	30	-	-	100
4	OEC-1		Open Elective - I	3	-	-	3	-	70	30	-	-	100
5	HSMC	IP45010	Industrial Engineering & Management	3	-	-	3	-	70	30	-	-	100
6		EC45481	Evaluation of Internship-2	-	-	4	-	2	-	-	100	-	100
7	PROJ	EC45498	Major Project Phase-I (AB group)	-	-	8	-	4	-	-	40	60	100
8	PROJ	EC45998	Major Project Phase-II (BA group)	-	-	8	-	4	-	-	40	60	100
Total			For AB Group	15	0	14	15	7	350	150	180	120	800
			For BA Group	15	0	14	15	7	350	150	180	120	800

SEMESTER - VIII

S.No.	Subject Category	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
				L	T	P			Th.	CW	SW	Pr.	Total
1	PEC-5		Program Elective-V	3	-	-	3	-	70	30	-	-	100
2	OEC-2		Open Elective - II	3	-	-	3	-	70	30	-	-	100
3		EC45882	Evaluation of Internship-3	-	2	4	-	4	-	-	100	-	100
4	PROJ	EC45998	Major Project Phase-II (AB group)	-	-	8	-	4	-	-	40	60	100
5	PROJ	EC45498	Major Project Phase-I (BA group)	-	-	8	-	4	-	-	40	60	100
Total			For AB Group	6	2	12	6	8	140	60	140	60	400
			For BA Group	6	2	12	6	8	140	60	140	60	400

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
IV B.Tech.(4YDC) ELECTRONICS & TELECOMMUNICATIONS ENGINEERING
List of Electives

Program Elective-III			SEMESTER VII
S.No.	Subject Category	Subject Code	Subject
1	PEC-III	EC45207	Microwave Devices and Circuits
2	PEC-III	EC45208	Optical Communication
3	PEC-III	EC-----	Advanced Antenna Design

Program Elective-IV			SEMESTER VII	Moocs/Swayam courses for PEC IV			
S.No.	Subject Category	Subject Code	Subject	S.No.	Subject Category	Subject Code	Subject
1	PEC-IV	CO45251	Data Science	1	PEC IV	EC4N001	5G Wireless Standard Design
2	PEC-IV	EI45252	VLSI Technology	2	PEC IV	EC4N002	Machine Learning and Deep Learning - Fundamentals and Applications
3	PEC-IV		Moocs/Swayam Online Courses	3	PEC IV	EC4N003	Deep Learning

Open Elective - I			SEMESTER VII				
S.No.	Subject Category	Subject Code	Subject	Moocs/Swayam courses for OEC-1			
1	OEC-I	EC45301	Internet of Things	S.No.	Subject Category	Subject Code	Subject
2	OEC-I	EC45302	Advanced Digital Signal Processing	1	OEC-1	EC45304	Digital Image Processing
3	OEC-I	EC45304	Digital Image Processing	2	OEC-1		RFIC Design
4	OEC-I		Moocs/Swayam Online Courses				

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
IV B.Tech.(4YDC) ELECTRONICS & TELECOMMUNICATIONS ENGINEERING
List of Electives

Program Elective-V			SEMESTER VIII
S.No.	Subject Category	Subject Code	Subject
1	PEC-IV	EC45602	Optical Networks
2	PEC-IV	EC45603	Advanced Mobile Communication
3	PEC-IV		Moocs/Swayam Online Courses on "Advanced Computer Networks"

Open Elective - II			SEMESTER VIII
S.No.	Subject Category	Subject Code	Subject
1	OEC-II	EC45759	Satellite and Radar Communication
2	OEC-II	EC45760	Introduction to Cryptography
3	OEC-II		Moocs/Swayam Online Courses on "Network Security"