

**I YEAR B.Tech. (4YDC)  
Common To All Branches**

2023

**Semester - A**

S. No.	Subject Category	Subject Code	Subject Name	Hours per Week			Credits		Maximum Marks				
				L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	BSC	MA 10001	Mathematics - I	3	1	0	4	0	70	30	0	0	100
2	BSC	<b>PH10017</b>	Physics	3	-	-	3	-	70	30	-	-	100
3	ESC	EE10015	Fundamentals of Electrical	2	1	-	3	0	70	30	0	0	100
4	ESC	CE10013	Fundamentals of Civil Engineering & Applied Mechanics	2	1	-	3	0	70	30	0	0	100
5	ESC	ME10049	Engineering Graphics	2	-	-	2	-	70	30	-	-	100
6	BSC (LC)	PH10151	Applied Physics Lab	-	-	2	-	1	-	-	20	30	50
7	ESC (LC)	EE10152	Electrical Engineering Lab	-	-	2	-	1	-	-	20	30	50
8	ESC (LC)	ME10153	Engineering Graphics Lab	-	-	4	-	2	-	-	40	60	100
9	HSMC	HU10191	Extra /Co curricular Activity	-	-	2	-	1	-	-	50	0	50
10	MC		Induction program & Universal Human Values	2-3 weeks in the beginning of I Year & 1 hour per week during semester									
<b>TOTAL</b>				<b>12</b>	<b>3</b>	<b>10</b>	<b>15</b>	<b>5</b>	<b>350</b>	<b>150</b>	<b>130</b>	<b>120</b>	<b>750</b>

**Semester - B**

S. No.	Subject Category	Subject Code	Subject Name	Hours per Week			Credits		Maximum Marks				
				L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	BSC	MA 10501	Mathematics – II	3	1	-	4	-	70	30	0	0	100
2	BSC	CH10516	Chemistry	3	-	-	3	-	70	30	-	-	100
3	HSMC	HU10551	Technical English	2	-	-	2	-	70	30	0	0	100
4	ESC	CO10507	Programming for Problem Solving	2	1	-	3	-	70	30	0	0	100
5	ESC	EC10508	Basic Electronics Engineering	2	-	-	2	-	70	30	0	0	100
6	BSC (LC)	CH10656	Chemistry Lab	-	-	2	-	1	-	-	20	30	50
7	HSMC (LC)	HU10653	Language Lab	-	-	2	-	1	-	-	20	30	50
8	ESC (LC)	CO10654	Computer Programming Lab	-	-	2	-	1	-	-	20	30	50
9	ESC (LC)	IP10655	Manufacturing Practices	-	-	4	-	2	-	-	40	60	100
10	HSMC	HU10691	Extra /Co curricular Activity	-	-	2	-	1	-	-	50	-	50
11	MC		Induction program & Universal Human Values	2-3 weeks in the beginning of I Year & 1 hour per week during semester									
<b>TOTAL</b>				<b>12</b>	<b>2</b>	<b>12</b>	<b>14</b>	<b>6</b>	<b>350</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>800</b>

Engineering Certificate shall be awarded after acquiring additional 10 credits out of which 6 credits as 2 Months industrial training within five years

**SHRI G. S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE**  
**II B.TECH.(4YDC) ELECTRONICS & TELECOMMUNICATIONS ENGINEERING**

**Semester: III**

S.No.	Subject Category	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				Total
				L	T	P			Th.	CW	SW	Pr.	
1	BSC	MA25014	Mathematics-III	3	1	-	4	-	70	30	-	-	100
2	PCC	EC25016	Electronics Devices	3	-	2	3	1	70	30	40	60	200
3	PCC	EC25017	Signals and Systems	3	-	-	3	-	70	30	-	-	100
4	PCC	EE25004	Network Theory & Analysis	3	-	2	3	1	70	30	40	60	200
5	PCC	EC25018	Digital System Design	3	-	2	3	1	70	30	40	60	200
6	HSMC	HU25005	Economics for Engineers	3	-	-	3	-	70	30	-	-	100
7	MC	ECM2002	Environmental Science*	2	-	-	-	-	-	50	-	-	50
<b>Total</b>				20	1	6	19	3	420	230	120	180	950

**Semester: IV**

S.No.	Subject Category	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				Total
				L	T	P			Th.	CW	SW	Pr.	
1	BSC	MA25563	Mathematics-IV	3	1	-	4	-	70	30	-	-	100
2	PCC	EC25564	Electromagnetic Waves	3	-	-	3	-	70	30	-	-	100
3	PCC	EC25565	Analog Circuits	3	-	2	3	1	70	30	40	60	200
4	BSC	EC25566	Probability Theory and Stochastic Processes	3	-	-	3	-	70	30	-	-	100
5	PCC	EC25567	Analog and Digital Communication	3	-	2	3	1	70	30	40	60	200
6	ESC	EC25568	Electronics Workshop	-	-	4	-	2	-	-	40	60	100
7	HSMC	HU25881	Values, Humanity and Professional Ethics	-	2	-	2	-	-	100	-	-	100
8	MC	HUM2051	Constitution of India*	2	-	-	-	-	-	50	-	-	50
<b>Total</b>				17	3	8	18	4	350	300	120	180	950

\* Non Credit Mandatory Subject

Internship 1 2-4 Weeks

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

**SEMESTER - V**

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	EC35008	Microprocessors and Microcontrollers	3	-	2	3	1	70	30	40	60	200
2	PCC	EC35009	Antenna and Wave Propagation	3	-	2	3	1	70	30	40	60	200
3	PCC	EC35010	VLSI Design	3	-	2	3	1	70	30	40	60	200
4	PCC	EC35011	Data Communication	3	-	-	3	-	70	30	-	-	100
5	PEC-1		Program Elective - I	3	-	2	3	1	70	30	40	60	200
6		EC35481	Evaluation of Internship-1	-	-	-	-	2	-	-	100	-	100
7		<b>HUM3501</b>	<b>Essence Of Indian Knowledge Tradition*</b>	<b>2</b>	-	-	-	-	-	<b>50</b>	-	-	<b>50</b>
<b>Total</b>				<b>17</b>	<b>0</b>	<b>8</b>	<b>15</b>	<b>6</b>	<b>350</b>	<b>200</b>	<b>260</b>	<b>240</b>	<b>1050</b>

**SEMESTER:VI**

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	EE35510	Control Systems	3	-	-	3	-	70	30	-	-	100
2	PCC	EC35511	Mobile Communication	3	-	-	3	-	70	30	-	-	100
3	PCC	EC35513	Computer Networks	3	-	2	3	1	70	30	40	60	200
4	PCC	EC35514	Applied Digital Signal Processing	3	-	2	3	1	70	30	40	60	200
5	PEC-2		Program Elective-II	3	-	2	3	1	70	30	40	60	200
6	ESC	<b>EC35882</b>	Electronics design & Simulation Workshop	-	-	<b>2</b>	-	<b>1</b>	-	-	40	60	100
<b>Total</b>				<b>15</b>	<b>0</b>	<b>8</b>	<b>15</b>	<b>4</b>	<b>350</b>	<b>150</b>	<b>160</b>	<b>240</b>	<b>900</b>

Internship 2 2-4 Weeks

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

<b>Elective I</b>			<b>SEMESTER - V</b>
<b>S.No.</b>	<b>Subject Category</b>	<b>Subject Code</b>	<b>Subject</b>
1	PEC-I	CO35251	Data Structure & Operating system
2	PEC-I	EC35252	Electronics Measurement

<b>Elective II</b>			<b>SEMESTER - VI</b>
<b>S.No.</b>	<b>Subject Category</b>	<b>Subject Code</b>	<b>Subject</b>
1	PEC-II	EC35661	Embedded Systems
2	PEC-II	IT35662	Intelligent systems

## SHRI G S INSTITUTE OF TECHNOLOGY &amp; SCIENCE, INDORE

## IV B.Tech.(4YDC) ELECTRONICS &amp; 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		EC45498	Major Project Phase-I ( AB group)	-	-	8	-	4	-	-	40	60	100
8		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**

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

<b>Program Elective-IV</b>			<b>SEMESTER VII</b>
<b>S.No.</b>	<b>Subject Category</b>	<b>Subject Code</b>	<b>Subject</b>
1		CO45251	Data Science
2		EI45252	VLSI Technology
3			Moocs/Swayam Online Courses

<b>Open Elective - I</b>			<b>SEMESTER VII</b>
<b>S.No.</b>	<b>Subject Category</b>	<b>Subject Code</b>	<b>Subject</b>
1		EC45301	Internet of Things
2		EC45302	Advanced Digital Signal Processing
3		BM45303	Digital Image Processing
4			Moocs/Swayam Online Courses

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**IV B.Tech.(4YDC) ELECTRONICS & TELECOMMUNICATIONS ENGINEERING**

**List of Electives**

<b>Program Elective-V</b>			<b>SEMESTER VIII</b>
<b>S.No.</b>	<b>Subject Category</b>	<b>Subject Code</b>	<b>Subject</b>
1		EE	Industrial and Power Electronics
2		EC45602	Optical Networks
3		EC	Information Theory & Coding
4			Moocs/Swayam Online Courses*

<b>Open Elective - II</b>			<b>SEMESTER VIII</b>
<b>S.No.</b>	<b>Subject Category</b>	<b>Subject Code</b>	<b>Subject</b>
1		EC45759	Satellite and Radar Communication
2		EC	Game Theory in Wireless Communication
3		EC45760	Introduction to Cryptography
4			Moocs/Swayam Online Courses*