

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

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	MA10011	Mathematics - I	3	1	-	4	-	70	30	-	-	100
2	BSC	PH10018	Physics	3	1	-	4	-	70	30	-	-	100
3	ESC	EE10015	Fundamentals of Electrical Engineering	2	1	-	3	0	70	30	-	-	100
4	ESC	CE10013	Fundamentals of Civil Engineering & Applied Mechanics	2	1	-	3	0	70	30	-	-	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	-	50
10	MC		Induction program & Universal Human Values	1 weeks in the beginning of 1 Year & 2 hour per week during semester									
TOTAL				12	4	10	16	5	350	150	130	120	750

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	MA10511	Mathematics - II	3	1	-	4	-	70	30	-	-	100
2	BSC	CH10517	Chemistry	3	-	-	3	-	70	30	-	-	100
3	HSMC	IU10552	Technical English	2	1	-	3	-	70	30	-	-	100
4	ESC	CO10507	Programming for Problem Solving	2	1	-	3	-	70	30	-	-	100
5	ESC	EC10508	Basic Electronics Engineering	2	-	-	2	-	70	30	-	-	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	1 weeks in the beginning of 1 Year & 2 hour per week during semester									
TOTAL				12	3	12	15	6	350	150	150	150	800

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

Received
20/9/24



SHRI G. S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
II B.TECH.(4YDC) ELECTRICAL 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	PCC	EE22024	Electrical Measurement & Instrumentation	3	-	-	3	-	70	30	-	-	100
2	PEC	EC22017	Analog & Digital Electronics	3	-	-	3	-	70	30	-	-	100
3	PCC	EE22016	Network Theory	3	-	-	3	-	70	30	-	-	100
4	BSC	MA22014	Mathematics -III	3	1	-	4	-	70	30	-	-	100
5	HSMC	HU22005	Economics for Engineers	3	-	-	3	-	70	30	-	-	100
6	PCC	EE22401	Electrical Measurement & Instrumentation Lab	-	-	2	-	1	-	-	40	60	100
7	PCC	EC22402	Analog & Digital Electronics Lab	-	-	2	-	1	-	-	40	60	100
8	PCC	EE22403	Network Theory Lab	-	-	2	-	1	-	-	40	60	100
9	LC	EE22443	Electrical Workshop-I	-	-	4	-	2	-	-	40	60	100
10	MC	EEM2002	Environmental Science*	2	-	-	-	-	-	50	-	-	50
Total				17	1	10	16	5	350	200	160	240	950

*Non Credit Mandatory Subject

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20/9/24

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

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	PCC	EE22511	Electrical Machines-I	3	-	-	3	-	70	30	-	-	100
2	PCC	EE22502	Electro-Magnetic Field & Materials	3	1	-	4	-	70	30	-	-	100
3	PEC	EE22513	Utilization of Electrical Energy	3	-	-	3	-	70	30	-	-	100
4	BSC	MA22563	Mathematics-IV	3	1	-	4	-	70	30	-	-	100
5	PCC	EE22801	Electrical Machines-I Lab	-	-	2	-	1	-	-	40	60	100
6	PCC	EE22802	Utilization of Electrical Energy Lab	-	-	2	-	1	-	-	40	60	100
7	LC	EE22841	Electrical Workshop & Design-II	-	-	4	-	2	-	-	40	60	100
8	HSMC	HU22881	Values, Humanity and Professional Ethics	-	2	-	2	-	-	100	-	-	100
9	MC	HUM2051	Constitution of India*	2	-	-	-	-	-	50	-	-	50
Total				14	4	8	16	4	280	270	120	180	850

*Non Credit Mandatory Subject
Internship 14 to 8 Weeks

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

III B.Tech.(4YDC) ELECTRICAL 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	EE32009	Control Systems	3	-	2	3	1	70	30	40	60	200
2	PCC	EE32005	Micro processor & Operating System	3	-	2	3	1	70	30	40	60	200
3	PCC	EE32007	Power Electronics-I	3	-	2	3	1	70	30	40	60	200
4	PCC	EE32008	Electrical Machines-II	3	-	2	3	1	70	30	40	60	200
5	PEC		Elective-I	3	-	-	3	-	70	30	-	-	100
6	PCC	EE32452	Power Apparatus Design	-		4	-	2	-	-	40	60	100
7	PROJ	EE32481	Evaluation of internship I	-	-	-	-	3	-	-	40	60	100
8	PROJ	EE32499	Minor Project I	-	-	4	-	2	-	-	40	60	100
9	MC	HUM3201	Essence Of Indian Knowledge Tradition*	2	-	-	-	-	-	50	-	-	50
Total				17	-	16	15	11	350	200	280	420	1250

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	EE32510	Hybrid Energy Systems	3	-	2	3	1	70	30	40	60	200
2	PCC	EE32509	Power Electronics-II	3	-	2	3	1	70	30	40	60	200
3	PCC	EE32571	Power System-I	3	-	2	3	1	70	30	40	60	200
4	PEC		Elective II	3	-	2	3	1	70	30	40	60	200
5	PCC	EE32511	Signals and Systems	3	-	-	3	-	70	30	-	-	100
6	PROJ	EE32999	Minor Project & Industrial Training	-	-	4	-	2	-	-	40	60	100
Total				15	-	12	15	6	350	150	200	300	1000

* Non Credit Mandatory Subject

Internship II : 4 to 8 Weeks

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

Elective I			SEMESTER - V
S.No.	Subject Category	Subject Code	Subject
1		EE32284	Reliability Engineering
2		EE	Analog and Digital Communication
3		EE32282	Basic Electrical Drive System

Elective II			SEMESTER - VI
S.No.	Subject Category	Subject Code	Subject
1		EE	Digital Control System
2		EE32603	Power System Planning
3		EE32605	Embedded System Design
4		EE32604	Energy Auditing and Conservations
5		EE	Data Structure and Embedded system Programming Concepts

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IV B.TECH. (4YDC) ELECTRICAL 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	PEC		Elective III	3	-	-	3	-	70	30	-	-	100
2	PCC	EE42005	Digital Signal Processing	3	-	-	3	-	70	30	-	-	100
3	HSMC	IP42006	Industrial Engineering & Management	3	-	-	3	-	70	30	-	-	100
4	PCC	EE42009	Power System-II	3	-	2	3	1	70	30	40	60	200
5	PCC	EE42010	Fault and System Protection	3	-	2	3	1	70	30	40	60	200
6	PROJ	EE42481	Evaluation of Internship-II	-	-	-	-	2	-	-	40	60	100
7	PROJ	EE42498	Major Project Phase-I (AB Group)	-	-	8	-	4	-	-	40	60	100
		EE42998	Major Project Phase-II (BA Group)										
Total				15	-	12	15	8	350	150	160	240	900

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		Elective-IV	3	-	-	3	-	70	30	-	-	100
2	PEC		Elective-V	3	-	-	3	-	70	30	-	-	100
3	PROJ	EE42882	Industrial Training and Internship	-	-	-	-	4	-	-	40	60	100
4	PROJ	EE42998	Major Project Phase-II (AB Group)	-	-	8	-	4	-	-	40	60	100
5		EE42498	Major Project Phase-I (BA Group)										
Total				6	0	8	6	8	140	60	80	120	400

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
IV B.TECH. (4YDC) ELECTRICAL ENGINEERING

List of Electives

Elective III			SEMESTER - VII
S.No.	Subject Category	Subject Code	Subject
1		EE	High Voltage Engineering
2		EE42251	Advanced Electrical Machines And Drives
3		EE	Micro Grid Architecture and Its Control
4	✓	EE42253	Efficient Embedded Processors
5	✓	EE42252	Power Quality

Elective IV			SEMESTER - VIII
S.No.	Subject Category	Subject Code	Subject
1		EE	Power System Dynamics and Control
2		EE42602	Electrical and Hybrid Vehicles
3		EE42660	HVDC & FACTS
4		EE	Real Time Operating Systems
5		EE	Grid Converters for Photovoltaic & Wind Energy Conversion Systems
6		EE42603	Data Science & Machine Learning

Elective V			SEMESTER - VIII
S.No.	Subject Category	Subject Code	Subject
1		EE42703	Smart Grid: Structure, Monitoring & Control
2		EE42704	Optimization Techniques Applied to Power System
3		EE42705	Electrical Safety
4		EE	Advanced and Intelligent Control in Power Electronics
5		EE42706	High Performance Computing