

2022

**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	EE22004	Electrical Measurement & Instrumentation	3	-	2	3	1	70	30	40	60	200
2	PEC	EE22007	Analog & Digital Electronics	3	-	2	3	1	70	30	40	60	200
3	PCC	EE22006	Network Theory	3	-	2	3	1	70	30	40	60	200
4	BSC	MA22014	Mathematics -III	3	1	-	4	-	70	30	-	-	100
5	HSMC	HU22005	Economics for Engineers	3	-	-	3	-	70	30	-	-	100
6	LC	EE22443	Electrical Workshop-I	-	-	4	-	2	-	-	40	60	100
7	MC	EEM2002	Environmental Science*	2	-	-	-	-	-	50	-	-	50
<b>Total</b>				17	1	10	16	5	350	200	160	240	950

EC 22007

**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	EE22501	Electrical Machines-I	3	-	2	3	1	70	30	40	60	200
2	PCC	EE22502	Electro-Magnetic Field & Materials	3	1	-	4	-	70	30	-	-	100
3	PEC	EE22503	Utilization of Electrical Energy	3	-	2	3	1	70	30	40	60	200
4	BSC	MA22563	Mathematics-IV	3	1	-	4	-	70	30	-	-	100
5	LC	EE22841	Electrical Workshop & Design-II	-	-	4	-	2	-	-	40	60	100
6	HSMC	HU22881	Values, Humanity and Professional Ethics	-	2	-	2	-	0	100	-	-	100
7	MC	HUM2051	Constitution of India*	2	-	-	-	-	-	50	-	-	50
<b>Total</b>				14	4	8	16	4	280	270	120	180	850

\*Non Credit Mandatory Subject  
Internship 14 to 8 Weeks

## SEMESTER - V

S.No.	Subject Category	Subject Code	Subject	Hours per Week			Th.	Pr.	Maximum Marks				
				L	T	P	Credit	Credit	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		<b>HUM3201</b>	<b>Essence Of Indian Knowledge Tradition*</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>50</b>	<b>-</b>	<b>-</b>	<b>50</b>
<b>Total</b>				<b>17</b>	<b>0</b>	<b>16</b>	<b>15</b>	<b>11</b>	<b>350</b>	<b>200</b>	<b>280</b>	<b>420</b>	<b>1250</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	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
<b>Total</b>				15	0	12	15	6	350	150	200	300	1000

Internship II : 4 to 8 Weeks

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

## III B.Tech.(4YDC) ELECTRICAL ENGINEERING

Elective I			SEMESTER - V
S.No.	Subject Category	Subject Code	Subject
		EE32281	Utilisation of Electrical Energy
1	EE32284	EE	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	<b>Data Structure and Embedded system Programming Concepts</b>

**SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE**  
**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)	-	-	-	-	-	-	-	-	-	-
<b>Total</b>				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)	-	-	-	-	-	-	-	-	-	-
<b>Total</b>				6	0	8	6	8	140	60	80	120	400

## SHRI G S INSTITUTE OF TECHNOLOGY &amp; 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