

## SHRI G. S. INSTITUTE OF TECHNOLOGY &amp; 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	EC22002	Analog 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

## 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	EC22562	Digital Electronics	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 I 4 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
<b>Total</b>				15	0	16	15	11	350	150	280	420	1200

**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 & SCIENCE, INDORE**  
**III B.Tech.(4YDC) ELECTRICAL ENGINEERING**

Elective I			SEMESTER - V
S.No.	Subject Category	Subject Code	Subject
1	✓	EE32281	Utilization of Electrical Energy
2			Reliability Engineering ✓
3			Analog and Digital Communication
4		EE32282	Basic Electrical Drive System
	✓	EE32283	Data Structure and Embedded system Programming Concepts

-EE32284.

Elective II			SEMESTER - VI
S.No.	Subject Category	Subject Code	Subject
1			Digital Control System
2	✓	EE32603	Power System Planning
3	✓	EE32605	Embedded System Design
4		EE32604	Energy Auditing and Conservations

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## 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	EE41882	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 & 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	✓	EE	Efficient Embedded Processors
5	✓	EE42252	Power Quality

EE42253.

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	✓	EE	Data Science & Machine Learning

EE42603

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	EE	Electrical Safety
4		EE	Advanced and Intelligent Control in Power Electronics
5	✓	EE	High Performance Computing

EE42705

EE42706