

Shri C.S. Institute of Technology & Science, Indore
Electronics & Instrumentation Engineering Department
B.Tech (Applicable to 2023-24 Enrolled Students)

Batch : 2023-27
 Academic Year 2023-24

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	PH10017	Physics	3	-	-	3	-	70	30	-	-	100				
3	ESC	EE10015	Fundamentals of Electrical Engineering	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													
TOTAL				12	3	10	15	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	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													
TOTAL				12	2	12	14	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

Shri G.S. Institute of Technology & Science, Indore
Electronics & Instrumentation Engineering Department
B.Tech (Applicable to 2022-23 Enrolled Students)

II Year/ III Sem

Batch : 2022-2026
 Academic Year 2023-24

S.no.	Category	Subject Code	Subject Name	Period/Week			Maximum Marks				Credits		Total Credits	Total Marks
				L	T	P	Theory		Practical		T	P		
							End Sem	CW	End Sem	SW				
1	DC-1	EI27001	Circuit Analysis & Synthesis	3		2	70	30	60	40	3	1	4	200
2	DC-2	EI27002	Fundamentals of Measurement	3		2	70	30	60	40	3	1	4	200
3	DC-3	EI27003	Electronics Devices & circuits	3		2	70	30	60	40	3	1	4	200
4	BSC-3	MA27014	Mathematics-III	3	1		70	30			4		4	100
5	DC-4	EI27006	Digital Electronics	3		2	70	30	60	40	3	1	4	200
6	MC-1	EIM2002	Environmental Science*	2				50						50
7	DLC-1	EI27498	Electronics Workshop			2			60	40		1	1	100
Total				17	1	10	350	200	300	200	16	5	21	1050

II Year/ IV Sem

S.no.	Category	Subject Code	Subject Name	Period/Week			Maximum Marks				Credits		Total Credits	Total Marks
				L	T	P	Theory		Practical		T	P		
							End Sem	CW	End Sem	SW				
1	DC-5	EI27501	Analog electronics	3		2	70	30	60	40	3	1	4	200
2	DC-6	EI27551	Sensors & Transducers	3		2	70	30	60	40	3	1	4	200
3	DC-7	EI27504	Circuit Design using HDLs	3		2	70	30	60	40	3	1	4	200
4	BSC-4	MA27563	Mathematics-IV	3	1		70	30			4		4	100
5	HU-1	HU27881	Values, Humanities & professional Ethics		2			100			2		2	100
6	HU-2	HU27506	Economics for Engineers	3			70	30			3		3	100
7	MC-2	HUM2052	Essence of Indian knowledge Tradition*	2				50						50
8	DLC-2	EI27882	Software Workshop			2			60	40		1	1	100
Total				17	3	8	350	300	240	160	18	4	22	1050

*Proposed in 27th Academic Council. Non credit mandatory subject

Internship-I To be completed any time during III/IV semester. Its evaluation/credits to be added in Semester V (Minimum 4 Weeks Duration)

Shri G.S. Institute of Technology & Science, Indore
Electronics & Instrumentation Engineering Department
B.Tech (Applicable to 2021-22 Enrolled Students)

Batch : 2021-2025
 Academic Year 2023-24

III Year/ V Sem

S.no.	Category	Subject Code	Subject Name	Period/Week			Maximum Marks				Credits	Total	Total Marks	
				L	T	P	Theory		Practical					
							End Sem	CW	End Sem	SW				
1	DC-7	IT37005	Data Structure	3		2	70	30	60	40	3	1	4	200
2	DC-8	EI37006	Microprocessor Systems	3		2	70	30	60	40	3	1	4	200
3	DC-9	EE37003	Control Systems	3		2	70	30	60	40	3	1	4	200
4	DC-10	EC37014	Analog & Digital Communication	3			70	30			3		3	100
5	PEC		Elective -I	3			70	30			3		3	100
6	DLC-3	EI37481	Test & Calibration			4			60	40		2	2	100
7	MC-3	HUM3701	Essence of Indian knowledge Tradition	2				50						50
8	DLC-4	EI37482	Internship Evaluation- I			4				50		2	2	50
Total				17	0	14	350	200	240	210	15	7	22	1000

III Year/ VI Sem

S.no.	Category	Subject Code	Subject Name	Period/Week			Maximum Marks				Credits	Total	Total Marks	
				L	T	P	Theory		Practical					
							End Sem	CW	End Sem	SW				
1	DC-11	EI37511	Filter Design & Simulation	3		2	70	30	60	40	3	1	4	200
2	DC-12	EI37513	High Frequency Engineering	3			70	30			3		3	100
3	DC-13	EC37512	Digital Signal Processing	3			70	30			3		3	100
4	DC-14	ME37502	Mechanical Measurements	3		2	70	30	60	40	3	1	4	200
5	PEC		Elective-II	3		2	70	30	60	40	3	1	4	200
6	DLC-5	EI37991	Mini Project			4			60	40		2	2	100
Total				15	0	10	350	150	240	160	15	5	20	900

Internship-II To be completed any time during V/VI semester. Its evaluation/credits to be added in Semester VII(Minimum 4 Weeks Duration)

Elective-I		
1	IP37251	Industrial Engineering & Management
2	EI37252	Instrument System Design
3	CO37253	Artificial Intelligence

Elective-II		
1	EI37701	Microcontroller & Embedded System
2	EI37xxx	Smart Cities & Instrumentation Engineering
3	EI37xxx	Agriculture & Environment Instrumentation

Shri G.S. Institute of Technology & Science, Indapur
Electronics & Instrumentation Engineering Department
B.Tech (Applicable to 2020-21 Enrolled Students)

Batch : 2020-2024
 Academic Year 2023-24

IV Year/ VII Sem

S.no.	Category	Subject Code	Subject Name	Period/Week			Maximum Marks				Credits		Total	Total Marks
				L	T	P	Theory		Practical		T	P		
							End Sem	CW	End Sem	SW				
1	DC-15	EI47053	Process Instrumentation	3	1	2	70	30	60	40	4	1	5	200
2	DC-16	EE47002	Power Electronics	3		2	70	30	60	40	3	1	4	200
3	DC-17	EI47055	VLSI Design	3		2	70	30	60	40	3	1	4	200
4	PEC		Elective -III	3			70	30			3		3	100
5	PEC		Elective -IV	3			70	30			3		3	100
7	DLC-7	EI47499	Major Project-I(AB Group)			6			60	40		3	3	100
	DLC-8	EI47999	Major Project-II(BA Group)			10			60	40		5	5	100
Total (With AB Group)				15	1	12	350	150	240	160	16	6	22	900
Total (With BA Group)				15	1	16	350	150	240	160	16	8	24	900

IV Year/ VIII Sem

S.no.	Category	Subject Code	Subject Name	Period/Week			Maximum Marks				Credits		Total	Total Marks
				L	T	P	Theory		Practical		T	P		
							End Sem	CW	End Sem	SW				
1	DC-18		Elective-V	3			70	30			3		3	100
2	DC-19		Elective -VI	3			70	30			3		3	100
3	Internship	EI47881	Industrial Training/ Internship (min 6 week/seminar with report)							100		8	8	100
4	DLC-8	EI47999	Major Project-II(AB Group)			10			60	40		5	5	100
5	DLC-7	EI47499	Major Project-I(BA Group)			6			60	40		3	3	100
Total (With AB Group)				6	0	10	140	60	60	140	6	13	19	400
Total (With BA Group)				6	0	6	140	60	60	140	6	11	17	400

Semester VII		
Elective-III		
1	EI47257	Fiber Optics and Photonics
2	XX47201	Data structure
Elective-IV		
1	EI47322	VLSI Technology
2	EI47301	Intelligent Instrumentation

Semester VIII		
Elective-V		
1	BM47613	Medical Instrumentation/NPTEL
2	EI47611	Digital Image Processing
3	EI47612	Computer Network
Elective-VI		
1	EI47776	Automation in Instrumentation/NPTEL
2	EI47701	Data Acquisition Systems