

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

Batch : 2022-2026  
 Academic Year 2022-23

I Year

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	PH10016	Physics	2	1	-	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									
<b>TOTAL</b>				<b>11</b>	<b>4</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>

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

II Year/ III Sem

Batch : 2021-2025  
 Academic Year 2022-23

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	HU	HU27005	Economics for Engineers	3			70	30			3		3	100
6	MC-1	EIM2002	Environmental Science*	2				50						
7	DLC-1	EI27498	Electronics Workshop			2			60	40		1	1	100
<b>Total</b>				<b>17</b>	<b>1</b>	<b>8</b>	<b>350</b>	<b>200</b>	<b>240</b>	<b>160</b>	<b>16</b>	<b>4</b>	<b>20</b>	<b>950</b>

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-4	EI27501	Analog electronics	3		2	70	30	60	40	3	1	4	200
2	DC-5	EI27551	Sensors & Transducers	3		2	70	30	60	40	3	1	4	200
3	DC-6	EI27562	Digital Electronics	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	HU27881	Values, Humanities & professional Ethics		2			100			2		2	100
6	MC-2	HUM2051	Constitution of India*	2				50						50
7	DLC-2	EI27992	Software Workshop			4			60	40		2	2	100
<b>Total</b>				<b>14</b>	<b>3</b>	<b>10</b>	<b>280</b>	<b>270</b>	<b>240</b>	<b>160</b>	<b>15</b>	<b>5</b>	<b>20</b>	<b>950</b>

\*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 2020-21 Enrolled Students)**

Batch : 2020-2024  
 Academic Year 2022-23

**III Year/ V 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-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	DLC-4	EI37482	Internship Evaluation- I			4				50		2	2	50
<b>Total</b>				<b>15</b>	<b>0</b>	<b>14</b>	<b>350</b>	<b>150</b>	<b>240</b>	<b>210</b>	<b>15</b>	<b>7</b>	<b>22</b>	<b>950</b>

**III Year/ VI 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-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
<b>Total</b>				<b>15</b>	<b>0</b>	<b>10</b>	<b>350</b>	<b>150</b>	<b>240</b>	<b>160</b>	<b>15</b>	<b>5</b>	<b>20</b>	<b>900</b>

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	Coxxx	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, Indore**  
**Electronics & Instrumentation Engineering Department**  
**B.Tech (Applicable to 2019-2020 Enrolled Students)**

IV Year/ VII Sem

Batch : 2019-2023

Academic Year 2021-22

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
<b>Total (With AB Group)</b>				<b>15</b>	<b>1</b>	<b>12</b>	<b>350</b>	<b>150</b>	<b>240</b>	<b>160</b>	<b>16</b>	<b>6</b>	<b>22</b>	<b>900</b>
<b>Total (With BA Group)</b>				<b>15</b>	<b>1</b>	<b>16</b>	<b>350</b>	<b>150</b>	<b>240</b>	<b>160</b>	<b>16</b>	<b>8</b>	<b>24</b>	<b>900</b>

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
<b>Total (With AB Group)</b>				<b>6</b>	<b>0</b>	<b>10</b>	<b>140</b>	<b>60</b>	<b>60</b>	<b>140</b>	<b>6</b>	<b>13</b>	<b>19</b>	<b>400</b>
<b>Total (With BA Group)</b>				<b>6</b>	<b>0</b>	<b>6</b>	<b>140</b>	<b>60</b>	<b>60</b>	<b>140</b>	<b>6</b>	<b>11</b>	<b>17</b>	<b>400</b>

**Semester VIII****Elective-V**

1	BM47613	Medical Instrumentation
2	EI47611	Digital Image Processing
3	EI47612	Computer Network
<b>Elective-VI</b>		
1	EI47776	Automation in Instrumentation
2	EI47701	Data Acquisition Systems