

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

Batch : 2020-24

Academic Year 2020-21

I Year

Semester - A

S. No.	Subject Category	Subject Code	Subject Name	Periods per Week			Credits		Max Marks				
				L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	BSC	MA10001	Mathematics - I	4	1	0	4	0	70	30	0	0	100
2	BSC	PH 10006	Physics	4	1	2	4	1	70	30	20	30	150
3	ESC	CE10003	Fundamentals of Civil Engineering & Applied Mechanics	4	0	2	3	1	70	30	20	30	150
4	ESC	ME10149	Engineering Graphics	3	0	4	2	2	70	30	40	60	200
5	ESC	EE10005	Fundamentals of Electrical Engineering	4	0	2	3	1	70	30	20	30	150
6	MC	CH10200*	Environmental Science	0	1	2	-	-	0	0	100	0	100
<b>TOTAL</b>				<b>19</b>	<b>3</b>	<b>12</b>	<b>16</b>	<b>5</b>	<b>350</b>	<b>150</b>	<b>200</b>	<b>150</b>	<b>850</b>

**Induction program of 3 week duration in July-Aug 2020**

Semester - B

S. No.	Subject Category	Subject Code	Subject Name	Periods per Week			Credits		Max Marks				
				L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	BSC	MA10501	Mathematics – II	4	1	0	4	0	70	30	0	0	100
2	BSC	CH10506	Chemistry	4	1	2	4	1	70	30	20	30	150
3	HSMC	HU10651	Technical English	4	0	2	3	1	70	30	20	30	150
4	ESC	CO10504	Computer Programming	4	0	2	3	1	70	30	20	30	150
5	ESC	<b>ME10650</b>	Fundamentals of Mechanical Engineering	4	0	2	3	1	70	30	20	30	150
6	ESC	IP10581	Manufacturing Practices	0	1	4	0	3	0	0	40	60	100
7	MC	<b>HU10699</b>	Universal Human Values	2 Hrs per week working Saturday					0	100	0	0	100
<b>TOTAL</b>				<b>20</b>	<b>3</b>	<b>12</b>	<b>17</b>	<b>7</b>	<b>350</b>	<b>250</b>	<b>120</b>	<b>180</b>	<b>900</b>

\* Mandatory Non credit course. PASS/FAIL status will appear in Marksheet

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

II Year/ III Sem

Batch : 2020-2024

Academic Year 2021-22

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	4		2	70	30	60	40	3	1	4	200
2	DC-2	EI27002	Fundamentals of Measurement	4		2	70	30	60	40	3	1	4	200
3	DC-3	EI27003	Electronics Devices & circuits	4		2	70	30	60	40	3	1	4	200
4	BSC-3	MA27014	Mathematics-III	4	1		70	30			4		4	100
5	HU	HU27005	Economics for Engineers	4			70	30			3		3	100
6	DLC-1	EI27498	Electronics Workshop			2			60	40		1	1	100
<b>Total</b>				<b>20</b>	<b>1</b>	<b>8</b>	<b>350</b>	<b>150</b>	<b>240</b>	<b>160</b>	<b>16</b>	<b>4</b>	<b>20</b>	<b>900</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	4		2	70	30	60	40	3	1	4	200
2	DC-5	EI27551	Sensors & Transducers	4		2	70	30	60	40	3	1	4	200
3	DC-6	EI27562	Digital Electronics	4		2	70	30	60	40	3	1	4	200
4	BSC-4	MA27563	Mathematics-IV	4	1		70	30			4		4	100
5	HU	HU27881	Values, Humanities & professional Ethics		3			100			2		2	100
6	DLC-2	EI27992	Software Workshop			4			60	40		2	2	100
<b>Total</b>				<b>16</b>	<b>4</b>	<b>10</b>	<b>280</b>	<b>220</b>	<b>240</b>	<b>160</b>	<b>15</b>	<b>5</b>	<b>20</b>	<b>900</b>

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

**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
<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>

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

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