

**STUDY & EVALUATION SCHEME**  
**B.TECH: MICROELECTRONICS AND INDUSTRIAL IOT**  
**II YEAR: III SEMESTER**

<b>S. NO.</b>	<b>SUBJECT CODE</b>	<b>SUBJECT</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CIE</b>	<b>ESE</b>	<b>TOTAL</b>	<b>C</b>
1		Digital System Design	3	1	0	40	60	100	4
2		Digital Electronics Lab	0	0	2	80	20	100	1
3		Signals & Systems	3	0	0	40	60	100	3
4		Network Theory	0	0	2	80	20	100	1
5		Electronic Devices	3	0	0	40	60	100	3
6		Electronic Devices Lab	3	1	0	40	60	100	4
7		Open Elective-I	3	0	0	40	60	100	3
<b>TOTAL</b>			<b>15</b>	<b>02</b>	<b>04</b>	<b>360</b>	<b>340</b>	<b>700</b>	<b>19</b>

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**II YEAR: IV SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1		Microcontrollers	3	0	0	40	60	100	3
2		Microcontrollers Lab	0	0	2	80	20	100	1
3		Embedded System	2	1	0	40	60	100	3
4		Microelectronics	3	1	0	40	60	100	4
5		Microelectronics Lab	0	0	2	80	20	100	1
6		Electromagnetic Fields Theory	3	1	0	40	60	100	4
7		Computer Organization & Architecture	3	1	0	40	60	100	4
8		Embedded System Lab	0	0	2	80	20	100	2
9		Soft Skills and Inter Personal Communication	2	0	0	100	00	100	2
10		Essence of Indian Traditional Knowledge	2	0	0	Satisfactory /Unsatisfactory			0
<b>TOTAL</b>			<b>20</b>	<b>04</b>	<b>04</b>	<b>500</b>	<b>400</b>	<b>900</b>	<b>24</b>

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**III YEAR: V SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1		Introduction to Internet of Things	3	1	0	40	60	100	4
3		Machine Learning	3	0	0	40	60	100	3
4		Machine Learning Lab	0	0	2	80	20	100	1
5		System Design using HDL	3	0	0	40	60	100	3
6		System Design using HDL Lab	0	0	2	80	20	100	1
7		EMMI	3	0	0	40	60	100	3
8		Open Elective-II	3	0	0	40	60	100	3
9		Open Elective-III	3	0	0	40	60	100	3
10		Aptitude and Reasoning and Online Test	0	0	2	100	-	100	0
11		Constitution of India	2	0	0	Satisfactory/ Unsatisfactory			0
<b>TOTAL</b>			<b>20</b>	<b>01</b>	<b>08</b>	<b>580</b>	<b>420</b>	<b>100</b>	<b>22</b>

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**III YEAR: VI SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1		Control System	3	1	0	40	60	100	4
2		Control System Lab	0	0	2	80	20	100	1
3		Introduction to Security of Cyber-Physical Systems	3	0	0	40	60	100	3
4		Deep Learning	3	0	0	40	60	100	3
5		Deep Learning Lab	0	0	2	80	20	100	1
6		Power Electronics	3	1	0	40	60	100	4
7		Power Electronics Lab	0	0	2	80	20	100	1
8		Department Elective-I	3	0	0	40	60	100	3
9		Open Elective-IV	3	0	0	40	60	100	3
10		Seminar	0	0	2	100	-	100	1
11		Industrial Visit	0	0	0	Satisfactory/ Unsatisfactory			0
12		Aptitude and Reasoning and Online Test	0	0	2	100	-	100	0
<b>TOTAL</b>			<b>18</b>	<b>02</b>	<b>10</b>	<b>680</b>	<b>420</b>	<b>1100</b>	<b>23</b>

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**IV YEAR: VII SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
1		Embedded Systems for IoT	3	0	0	40	60	100	3
2		Embedded Systems for IoT Lab							
3		Department Elective II	3	0	0	40	60	100	3
4		Open Elective –V	3	0	0	40	60	100	3
5		Open Elective–VI	3	0	0	40	60	100	3
6		Project Stage - I	0	0	6	100	00	100	3
7		Summer Training (During Summer Vacation)	0	0	2	100	00	100	1
<b>TOTAL</b>			<b>12</b>	<b>00</b>	<b>08</b>	<b>360</b>	<b>240</b>	<b>600</b>	<b>16</b>

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**B.TECH: MICROELECTRONICS AND INDUSTRIAL IOT**  
**IV YEAR: VIII SEMESTER**

<b>S. NO.</b>	<b>SUBJECT CODE</b>	<b>SUBJECT</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CIE</b>	<b>ESE</b>	<b>TOTAL</b>	<b>C</b>
1		Department Elective III	3	0	0	40	60	100	3
2		Industrial IOT	2						2
3		Open Elective—VII	3	0	0	40	60	100	3
4		Open Elective—VIII	3	0	0	40	60	100	3
5		Project Stage - II	0	0	16	80	20	100	6
<b>TOTAL</b>			<b>09</b>	<b>00</b>	<b>16</b>	<b>200</b>	<b>200</b>	<b>400</b>	<b>15</b>

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**LIST OF ELECTIVE**

S. NO.	SUBJECT CODE	SUBJECT	DEPARTMENT TO OFFER	SEMESTER	O.E .
1		Organizational Psychology	HU	III	OE-I
		Organizational Sociology			
2		Non-Conventional Energy Resources	MA	V	OE-II
		Operational Research			
		Data Structure	CS		
3		Economics	Management	V	OE-III
		Principles of Management			
4		Space Sciences		VI	OE-IV
		Project Management	ME		
		Web Technologies	CS		
5		Automation & Robotics		VII	OE-V
		Total Quality Management	ME		
		Database Systems	CS		
6		Soft Computing (Neural Networks, Fuzzy Logic and Genetic Algorithm)		VII	OE-VI
		Maintenance Engineering and Management	ME		
		E-Commerce	CS		
7		Nano Sciences		VIII	OE-VII
		Strength of Material	ME		
		Cyber Security and Cyber Laws	CS		
8		Laser Systems and Applications		VIII	OE-VIII
		Thermal and Fluid Engineering	ME		
		Computer Network	CS		

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**B.TECH: MICROELECTRONICS AND INDUSTRIAL IOT**  
**LIST OF DEPARTMENT ELECTIVES**

<b>S. NO</b>	<b>SUBJECT CODE</b>	<b>SUBJECT</b>	<b>DEPARTMENT TO OFFER</b>	<b>SEMESTER</b>	<b>D.E.</b>
1		System Design using Verilog	EEE	VI	D.E.-I
		Digital Image & Video Processing			
		Information Theory and Coding			
		CMOS Design			
2		IOT and Applications	EEE	VII	D.E.-II
		Drone Technology and Robotics			
		Biomedical Signal Processing			
		Information Theory and Coding			
3		Analog and Digital Communication	EEE	VIII	D.E.-III
		Mobile Communication and Networks			
		Satellite Communication			
		Antennas and Propagation			