

**STUDY & EVALUATION SCHEME**  
**B.TECH. + M. TECH. (EC) (DIGITAL COMMUNICATION)**  
**II YEAR: III SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	BMA3001/ ---	Mathematics-III/ Science Based Open Elective <sup>1</sup>	3	2	-	40	60	100	4
2.	BHU3018/ BHU3019	Organizational Psychology/ Organizational Sociology	2	0	-	40	60	100	2
3.	BEC3001	Signals and Systems	3	2	-	40	60	100	4
4.	BEC3002	Electro-Magnetic Field Theory	3	2	-	40	60	100	4
5.	BEC3003	Network analysis and Synthesis	3	2	-	40	60	100	4
6.	BEC3004	Fundamentals of Electronic Devices	3	1	-	40	60	100	3
<b>PRACTICAL/TRAINING/PROJECT</b>									
7.	BEC3501	Signals and Systems Lab(MATLAB)	0	0	2	80	20	100	1
8.	BEC3502	Electronics Lab – I	0	0	2	80	20	100	1
9.	BEC3503	Electronics Workshop & PCB Lab	0	0	2	80	20	100	1
<b>TOTAL</b>			<b>17</b>	<b>9</b>	<b>6</b>	<b>480</b>	<b>420</b>	<b>900</b>	<b>24</b>

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**II YEAR: IV SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	---/ BMA4001	Science Based Open Elective <sup>1</sup> / Mathematics-III	3	2		40	60	100	4
2	BHU4019/ BHU4018	Organizational Sociology/ Organizational Psychology	2	0	-	40	60	100	2
3	BEC4001	Digital Electronics	3	2	-	40	60	100	4
4	BEC4002	Electronics Circuits	3	1	-	40	60	100	3
5	BEC4003	Microprocessor	3	1	-	40	60	100	3
6	BEC4004	Electronic Instrumentation and Measurement	3	1	-	40	60	100	3
<b>PRACTICAL/TRAINING/PROJECT</b>									
7	BEC4501	Digital Electronics Lab – I	0	0	2	80	20	100	1
8	BEC4502	Electronics Lab-II	0	0	2	80	20	100	1
9	BEC4503	Microprocessor Lab	0	0	2	80	20	100	1
	BEC4504	Measurement Lab	0	0	2	80	20	100	1
<b>TOTAL</b>			<b>17</b>	<b>7</b>	<b>8</b>	<b>560</b>	<b>440</b>	<b>1000</b>	<b>23</b>

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**III YEAR: V SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	BMG5006/ BMG5007	Engineering and Managerial Economics / Principles of Management	3	0	-	40	60	100	3
2	BEC5001	Integrated Circuits	3	2	-	40	60	100	4
3	BEC5002	Analog Communication	3	2	-	40	60	100	4
4	BEC5010	Computer Organization	3	1	-	40	60	100	3
5	BEC5004	Control Systems	3	2	-	40	60	100	4
6	BEC5005	Microwave Antenna	3	1	-	40	60	100	3
<b>PRACTICAL/TRAINING/PROJECT</b>									
7	BEC5501	IC Lab	0	0	2	80	20	100	1
8	BEC5502	Communication Lab-I	0	0	2	80	20	100	1
9	BEC5508	Computer Organization Lab	0	0	2	80	20	100	1
10	BEC5504	Control System Lab(Mat lab)	0	0	2	80	20	100	1
<b>TOTAL</b>			<b>18</b>	<b>8</b>	<b>8</b>	<b>560</b>	<b>440</b>	<b>1000</b>	<b>25</b>

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**III YEAR: VI SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	BMG6006/ BMG6007	Engineering and Managerial Economics / Principles of Management	3	0	-	40	60	100	3
2	BEC6001	Digital Communication	3	2	-	40	60	100	4
3	BEC6002	DSP	3	2	-	40	60	100	4
4	BEC6003	Microwave Engineering	3	1	-	40	60	100	3
5	BEC6004	Satellite Communication	3	1	-	40	60	100	3
6	-	Department Elective-I	3	1	-	40	60	100	3
<b>PRACTICAL/TRAINING/PROJECT</b>									
7	BEC6501	Communication Lab-II	0	0	2	80	20	100	1
8	BEC6502	DSP Lab	0	0	2	80	20	100	1
9	BEC6503	Microwave Lab	0	0	2	80	20	100	1
10	BEC6504	Seminar	0	0	2	100	-	100	1
11	BEC6505	Industrial Visit	0	0	-	100	-	100	1
<b>TOTAL</b>			<b>18</b>	<b>7</b>	<b>8</b>	<b>680</b>	<b>420</b>	<b>1100</b>	<b>25</b>

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**IV YEAR: VII SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	BEC7002	Telecommunication Switching	3	2	-	40	60	100	4
2	BEC7003	VLSI Design	3	1	-	40	60	100	3
3	MEC7001	Information Theory and Coding	4	2	-	40	60	100	5
4	MEC7002	Random Variables and Processes	4	2	-	40	60	100	5
5	MEC7003	Advanced Digital Communication Systems	4	2	-	40	60	100	5
<b>PRACTICAL/TRAINING/PROJECT</b>									
7	BEC7502	Communication Lab-III	0	0	2	80	20	100	1
8	BEC7503	Summer Training	0	0	2	100	-	100	1
9	MEC7501	Communication Lab-I	0	0	4	80	20	100	2
<b>TOTAL</b>			<b>18</b>	<b>9</b>	<b>8</b>	<b>460</b>	<b>340</b>	<b>800</b>	<b>26</b>

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**IV YEAR: VIII SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	MEC8001	Estimation And Detection Theory	4	2	-	40	60	100	5
2	MEC8002	Mobile Cellular Telecommunication	4	2	-	40	60	100	5
3	MEC8003	Optical Communication	4	2	-	40	60	100	5
4	---	Department Elective-II	3	0	-	40	60	100	3
5	---	Elective-I	4	2	-	40	60	100	5
<b>PRACTICAL/TRAINING/PROJECT</b>									
7	MEC8501	Communication Lab-II	0	0	4	80	20	100	2
8	MEC8502	Seminar	0	0	2	100	-	100	1
<b>TOTAL</b>			<b>19</b>	<b>8</b>	<b>6</b>	<b>380</b>	<b>320</b>	<b>700</b>	<b>26</b>

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**V YEAR: IX SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	---	Elective-II	4	2	-	40	60	100	5
2	---	Elective-III	4	2	-	40	60	100	5
<b>PRACTICAL/TRAINING/PROJECT</b>									
7	MEC9501	Seminar/Minor Project	-	-	4	100	-	100	4
8	MEC9502	Dissertation-I	-	-	6	100	-	100	6
<b>TOTAL</b>			<b>8</b>	<b>4</b>	<b>10</b>	<b>280</b>	<b>120</b>	<b>400</b>	<b>20</b>

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**V YEAR: X SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>PRACTICAL/TRAINING/PROJECT</b>									
7	MEC0501	Dissertation-II	-	-	18	80	20	100	18
8	MEC0502	Comprehensive Viva	-	-	-	100	-	100	2
<b>TOTAL</b>			-	-	<b>18</b>	<b>180</b>	<b>20</b>	<b>200</b>	<b>20</b>
<b>GRAND TOTAL</b>			<b>113</b>	<b>32</b>	<b>68</b>	<b>3480</b>	<b>2620</b>	<b>6100</b>	<b>189</b>

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**LIST OF DEPARTMENT ELECTIVES (B.TECH.)**

<b>S. NO.</b>	<b>SUBJECT CODE</b>	<b>SUBJECT NAME</b>	<b>SEMESTER</b>
<b>SCIENCE BASED OPEN ELECTIVES I</b>			
1	BCY3301/BCY4301	Industrial Chemical & Environment	<b>III/IV Semester</b>
2	BCY3302/BCY4302	Polymer Technology	
3	BMA3301/BMA4301	Discrete Mathematics	
4	BST3301/BST4301	Statistical & Numerical Analysis	
5	BPH3301/BPH4301	Nano Science	
6	BPH3302/BPH4302	Space Science	
<b>DEPARTMENT ELECTIVE-I</b>			
1	BEC6101	Advanced Semiconductor Devices	<b>VI Semester</b>
2	BEC6102	Microcontroller	
3	BEC6103	Filter Design	
<b>DEPARTMENT ELECTIVE-II</b>			
1	BEC8106	Digital System Design Using VHDL	<b>VIII Semester</b>
2	BEC8107	Spread Spectrum systems	
3	BEC8108	Artificial Neural Networks	
4	BEC8109	Fundamentals of Radar and Navigation	
5	BEC8110	Digital Image processing	

<b>S. NO.</b>	<b>SUBJECT CODE</b>	<b>SUBJECT</b>
<b>ELECTIVE-I (SEMESTER-VIII)</b>		
<b>1</b>	MEC8101	Communication Networks
<b>2</b>	MEC8102	Satellite communication
<b>3</b>	MEC8103	Telecommunication System Engineering
<b>4</b>	MEC8104	Advanced Digital Image Processing
<b>ELECTIVE-II (SEMESTER-IX)</b>		
1	MEC9101	Advanced Digital Signal Processing
2	MEC9102	Analog Signal Processing
3	MEC9103	Microprocessors and Microcomputer Applications
4	MEC9104	Array Processing
<b>ELECTIVE-III (SEMESTER-IX)</b>		
1	MEC9201	VHDL Based System Design
2	MEC9202	VLSI Design
3	MEC9203	Fuzzy Logic and Control
4	MEC9204	Computational Methods For Communication