

## Department of Electronics and Communication Engineering

### B. Tech. in **Electronics and Communication** Specialization in **Design and Manufacturing**

<b>Semester I</b>					
Sl. No.	Code	Course Name	Category	I-P	Credit
1	MAT104T	Calculus	BSC	3-0	3
2	PHY108T	Engineering Mechanics	BSC	3-0	3
3	COM105T	Computational Engineering	BEC	3-0	3
4	DES101T	Concepts of Engineering Design	DES	3-0	3
5	INT107T	English for Communication	HMC	2-0	2
6	DES103T	Earth, Environment & Design	DES	2-0	P/F
7	INT110P	Engineering Skill Practice	BEC	0-3	2
8	PHY109P	Material & Mechanics Practice	BSC	0-3	2
9	COM105P	Computational Engineering Practice	BEC	0-3	2
10	INT109P	Engineering Graphics	DES	1-3	3
<b>Total</b>					<b>23</b>
<b>Semester II</b>					
Sl. No.	Code	Course Name	Category	I-P	Credit
1.	MAT105T	Differential Equation	BSC	3-0	3
2	PHY107P	Engineering Electromagnetics	BSC	3-0	3
3	INT108T	Science and Engineering Materials	BEC	3-0	3
4	EC101T	Basic Electrical and Electronics Engineering	BEC	3-0	3
5	DES102T	Design History	DES	2-0	2
6	MAN102T	Profession Ethics for Engineers	HMC	2-0	P/F
7	DES104P	Industrial Design Sketching	BEC	0-3	2
8	INT111P	Measurement & Data Analysis Practice	BSC	0-3	2
9	PHY107P	Engineering Electromagnetic Practice	BSC	0-3	2
10	DES105P	Design Realization	DES	0-3	2
<b>Total</b>					<b>22</b>

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<b>Semester III</b>					
<b>Sl. No.</b>	<b>Code</b>	<b>Course Name</b>	<b>Category</b>	<b>I-P</b>	<b>Credit</b>
1	CS208P	Fundamentals of Data structures	PEC	2-2	4
2	EC201T	Signals and Systems	PEC	3-0	3
3	EC202T	Analog Circuits	PEC	3-0	3
4	EC202P	Analog Circuits Practice	PEC	0-3	2
5	EC203T	Digital Logic Circuits	PEC	3-0	3
6	EC203P	Digital Logic Circuits Practice	PEC	0-3	2
7	MAN202 T	Sociology of Design	DES	3-0	3
8	MAT204 T	Linear Algebra	PEC	3-0	3
<b>Total</b>					<b>23</b>
<b>Semester IV</b>					
<b>Sl. No.</b>	<b>Code</b>	<b>Course Name</b>	<b>Category</b>	<b>I-P</b>	<b>Credit</b>
1.	EC204T	Digital Signal Processing	PEC	3-0	3
2	EC204P	Digital Signal Processing Practice	PEC	0-3	2
3	EC205I	Electrical Drive Practice	PEC	1-3	3
4	EC206T	Mechanical Design of Electronic Systems	PEC	3-0	3
5	EC207T	Power Electronics	PEC	3-0	3
6	MAN203 T	Engineering Economics	HMC	3-0	3
7	MAT205 T	Probability Theory and Statistics	BSC	3-0	3
<b>Total</b>					<b>20</b>

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<b>Semester V</b>					
<b>Sl. No.</b>	<b>Code</b>	<b>Course Name</b>	<b>Category</b>	<b>I-P</b>	<b>Credit</b>
1	EC301T	Micro Processors and Microcontrollers	PEC	3-0	3
2	EC301P	Micro Processors and Microcontrollers Practice	PEC	0-3	2
3	EC302T	Analog and Digital Communication Techniques	PEC	3-0	3
4	EC302P	Analog and Digital Communication Techniques Practice	PEC	0-3	2
5	EC303T	Control Systems	PEC	3-0	3
6	EC303I	Electronic Manufacturing and Prototyping	PEC	1-3	3
7	EC304I	Sensing and Instrumentation Practice	PEC	1-3	3
8	MAN301T	Entrepreneurship and Management Functions	HMC	3-0	3
<b>Total</b>					<b>22</b>
<b>Semester VI</b>					
<b>Sl. No.</b>	<b>Code</b>	<b>Course Name</b>	<b>Category</b>	<b>I-P</b>	<b>Credit</b>
1.	DES302T	Design for Quality and Reliability	DES	3-0	3
2	EC305T	VLSI System Design	PEC	3-0	3
3	EC305P	VLSI System Design Practice	PEC	0-3	2
4	EC306T	Data Communication and Networking	PEC	3-0	3
5	EC307I	Embedded Systems Practice (Project based learning)	PEC	1-3	3
6	EC308P	Product Design Practice	PCD	0-3	2
7	ECXXX	Departmental Elective I	ELE	3-0	3
8	ECXXX	Departmental Elective II	ELE	3-0	3
<b>Total</b>					<b>22</b>

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<b>Semester VII</b>					
<b>Sl. No.</b>	<b>Code</b>	<b>Course Name</b>	<b>Category</b>	<b>I-P</b>	<b>Credit</b>
1	XXXX	Internship	PCD	NA	5
2	XXXX	Free Elective-I	ELE	3-0	3
3	XXXX	Design Project	DES	0-6	5
<b>Total</b>					<b>13</b>
<b>Semester VIII</b>					
<b>Sl. No.</b>	<b>Code</b>	<b>Course Name</b>	<b>Category</b>	<b>I-P</b>	<b>Credit</b>
1.	ECXXT	Departmental Elective-III	ELE	3-0	3
2	XXXXT	Free Elective-II	ELE	3-0	3
3	XXXXT	Design Elective	DES	3-0	3
4	XXXXX	Project	PCD	NA	10
<b>Total</b>					<b>19</b>