Department of Electronics and Telecommunication Engineering

UG Scheme-2023 (NEP-2020)

Course Code	Name of Course	Course Category	Teaching Scheme				Credits	Evaluation Scheme					
								Theory			Practical		Total Marks
			L	T	P	Total Hours		TAE	CAE	ESE	INT	EXT	
SEMESTER- I													
23BTSHL102EC 23BTSHP102EC	Environmental Chemistry	BSC 4	1	-	2	3	2	10	15	50	25	-	100
23BTSHL103EC	Matrices and Differential Calculus	BSC 1	2	1	-	3	3	10	15	50	--	--	75
23BTSHL10XEC	Elective : Indian Knowledge System	IKS	2	-	-	2	2	10	15	50	-	-	75
23BTSHP112EC	Liberal Learning Courses-I	CC1			4	4	2				25	25	50
23BTEEL101EC 23BTEEP101EC	Basic Electrical Engineering	ESC 1	3	-	2	5	4	10	15	50	25	--	100
23BTECL101 23BTECP101	Digital Logic Design	ESC 2	3		2	5	4	10	15	50	25	--	100
23BTECL10X 23BTECP10X	Elective -I : Vocational and Skill Enhancement	VSEC 1	1	-	2	3	2	10	15	--	25	--	50
TOTAL			**12**	**1**	**12**	**25**	**19**	**60**	**90**	**250**	**125**	**25**	**550**

Course Code	Name of Course	Course Category	Teaching Scheme				Credits	Evaluation Scheme					
								Theory			Practical		Total Marks
			L	T	P	Total Hours		TAE	CAE	ESE	INT	EXT	
SEMESTER-II													
23BTSHL101EC 23BTSHP101EC	Engineering Physics	BSC 2	1	1	2	4	3	10	15	50	25	--	100
23BTSHL104EC	Integral Calculus and Differential Equations	BSC3	2	1	-	3	3	10	15	50	-	-	75
23BTSHL108EC 23BTSHP108EC	Communication Skills	AEC 1	1	-	2	3	2	10	15	--	25	--	50
23BTSHP113EC	Liberal Learning Courses-II	CC 2	-	-	4	4	2	-	-	-	25	25	50
23BTITL102EC 23BTITP102EC	Programming for Problem Solving	ESC 3	3	-	2	5	4	10	15	50	25	-	100
23BTSHL115EC 23BTSHP115EC	Biomedical Engineering	BSC5	2	-	2	4	3	10	15	50	25	-	100
23BTECL105	Sensor and Instrumentation	PCC 1	2	-	-	2	2	10	15	50	-	-	75
23BTECL10X 23BTECP10X	Elective –II: Vocational and Skill Enhancement	VSEC 2	1	-	2	3	2	10	15	-	25	-	50
TOTAL			**12**	**2**	**14**	**28**	**21**	**70**	**105**	**250**	**150**	**25**	**600**

Department of Electronics and Telecommunication Engineering

ELECTIVES

23BTSHL10XEC -Elective : Indian Knowledge System -

Course	Course Code (L)	Course Code(P)
Elective: IKS-1- Concepts and Applications inEngineering	23BTSHL109EC	Not Applicable
Elective: IKS-2- Social History of Medicine In Colonial India	23BTSHL110EC	Not Applicable
Elective: IKS-3- Modern Indian Architecture	23BTSHL111EC	Not Applicable

Electronics and Telecommunication Board

Course	Course Code (L)	Course Code(P)
Elective -I : Vocational and Skill Enhancement I-Introduction to Drones	23BTECL102	23BTECP102
Elective -I : Vocational and Skill Enhancement-I	23BTECL103	23BTECP103
Elective -I : Vocational and Skill Enhancement- I	23BTECL104	23BTECP104
Elective -II : Vocational and Skill Enhancement-	23BTECL106	23BTECP106
Elective -II : Vocational and Skill Enhancement- IoT and its Applications	23BTECL107	23BTECP107
Elective -II : Vocational and Skill Enhancement-	23BTECL108	23BTECP108

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Course Code	Name of Course	Course Category	Teaching Scheme				Credits	Evaluation Scheme					
								Theory			Practical		Total Marks
			L	T	P	Total Hours		TAE	CAE	ESE	INT	EXT	
SEMESTER-III													
23BTECL201 23BTECP201	Electronics Devices and Circuits	PCC 2	3	-	2	5	4	10	15	50	25	-	100
23BTECL202	Signals and Systems	PCC 3	3	1	-	4	4	10	15	50	-	-	75
23BTMBL201EC	Engineering Economics and Industrial Management	EEMC 1	2	-	-	2	2	10	15	50	-	-	75
23BTECL206	Multidisciplinary Minor	MDM 1	2	-	-	2	2	10	15	50	-	-	75
23BTXXXXX	Open Elective I	OE 1	4	-	-	4	4	10	15	50	-	-	75
23BTSHLXXX	Humanities Elective	VEC 1	2	-	-	2	2	10	15	50	-	-	75
23BTECP203	Electronics Product Design	CEP	-	-	4	4	2	-	-	-	50	-	50
TOTAL			**16**	**01**	**06**	**23**	**20**	**60**	**90**	**300**	**75**	**00**	**525**

Department of Electronics and Telecommunication Engineering

Course	Offered to Department	Name of Subject	Course Code
Multidisciplinary Minor (MDM1)	CSE	Fundamentals of Electronic Devices	23BTECL206CS
Multidisciplinary Minor (MDM1)	ETC	Computer Architecture	23BTCSL202EC
Humanities Elective	ETC	Applied life skills for Progressive Excellence	23BTSHL227
		Content Designing and Media Fundamentals	23BTSHL228
		Cyber Ethics and Moral Responsibility	23BTSHL229
Open Elective I	ETC	Advanced Communication Skills	23BTSHL225
		Introduction to Block Chain Technology	23BTCSL211
		Nonconventional Energy Sources	23BTEEL210
		Web Designing and Analytics	23BTDSL202
		Data Analysis for Business Intelligence	23BTAIL205
Open Elective I	Other than ETC	Sensors and its Applications	23BTECL210

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Course Code	Name of Course	Course Category	Teaching Scheme				Credits	Evaluation Scheme					
								Theory			Practical		Total Marks
			L	T	P	Total Hours		TAE	CAE	ESE	INT	EXT	
SEMESTER-IV													
23BTECL204 23BTECP204	Analog Integrated Circuits	PCC 4	3	-	2	5	4	10	15	50	25	25	125
23BTECL205 23BTECP205	Microcontroller & Applications	PCC 5	3	-	2	5	4	10	15	50	25	-	100
23BTMBL202EC	Entrepreneurship Development Practices	EEMC 2	2	-	-	2	2	10	15	50	-	-	75
23BTSHL233EC	Universal Human Values 2: Understanding Harmony	VEC 2	2	-	-	2	2	10	15	50	-	-	75
23BTECL208 23BTECP208	Vocational and Skill Enhancement Elective –III	VSEC 3	1	-	2	3	2	10	15	-	25	-	50
23BTXXXXX	Open Elective II	OE 2	2	-	-	2	2	10	15	50	-	-	75
23BTECL207	Multidisciplinary Minor	MDM 2	2	-	-	2	2	10	15	50	-	-	75
23BTSHL231EC 23BTSHP231EC	Aptitude and Employability Skill	AEC 2	1	-	2	3	2	10	15	-	25	-	50
TOTAL			**16**		**08**	**24**	**20**	**80**	**120**	**300**	**100**	**25**	**625**

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Course	Offered to Department	Name of Subject	Course Code
Multidisciplinary Minor (MDM2)	IT	Introduction to Signals and System	23BTECL207IT
Multidisciplinary Minor (MDM2)	ETC	Cyber Crimes and Investigation	23BTCYL205EC
Vocational and Skill Enhancement Elective -III	ETC	Introduction to Robotics	23BTECL208 23BTECP208
Open Elective-II	Other than ETC	Principles of Electronic Communication	23BTECL209
Open Elective-II	ETC	Basics of GAME Programming	23BTITL221
		Foundation of Electric Vehicle	23BTEEL215
		Introduction to Neural Networks and Deep Learning	23BTAIL206
		Machine Learning Concepts	23BTDSL212
		Web Security	23BTCYL206

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Course Code	Name of Course	Course Category	Teaching Scheme				Credits	Evaluation Scheme					
								Theory			Practical		Total Marks
			L	T	P	Total Hours		TAE	CAE	ESE	INT	EXT	
SEMESTER-V													
23BTECL301	Electromagnetics and Waveguides	PCC 6	3	-	-	3	3	10	15	50	-	-	75
23BTECL302 23BTECP302	Digital System Design	PCC 7	2	-	2	4	3	10	15	50	25	-	100
23BTECL303 23BTECP303	Analog Communication	PCC 8	3	-	2	5	4	10	15	50	25	-	100
23BTECLXXX 23BTECPXXX	Program Elective I	PEC 1	3	-	2	5	4	10	15	50	25	-	100
23BTXXXXX	Open Elective III	OE 3	2	-	-	2	2	10	15	50	-	-	75
23BTXXXXX	Multidisciplinary Minor	MDM 3	3	-	2	5	4	10	15	50	25	-	100
23BTSHP301	Research Methodology	RM	-	-	4	4	2	-	-	-	25	-	25
		TOTAL	16	-	12	28	22	60	90	300	125	-	575

Course	Offered to Department	Name of Subject	Course Code (L)
Program Elective I	ETC	Introduction to Computer Networks	23BTECL306 23BTECP306
		Embedded System Design and RTOS	23BTECL307 23BTECP307
		Power Electronics	23BTECL308 23BTECP308
Open Elective III	Other than ETC	Introduction to Mechatronics	23BTECL309
Open Elective III	ETC	Cloud Computing	23BTAIL312
		Environmental Impact Assessment	23BTCEL308
		Scripting Languages	23BTCSL306
		Soft Computing	23BTDSL331
		Cyber Forensics	23BTITL303
Multidisciplinary Minor (MDM 3)	Other than ETC	Microcontroller and Applications	23BTECL205XX 23BTECP205XX
Multidisciplinary Minor (MDM 3)	ETC	Data Structure with C Programming	23BTXXXXX 23BTXXXXX

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Course Code	Name of Course	Course Category	Teaching Scheme				Credits	Evaluation Scheme					
								Theory			Practical		Total Marks
			L	T	P	Total Hours		TAE	CAE	ESE	INT	EXT	
SEMESTER-VI													
23BTECL304 23BTECP304	Digital Signal Processing	PCC 9	2	1	2	5	4	10	15	50	25	25	125
23BTECL305 23BTECP305	Digital Communication	PCC 10	2	-	2	4	3	10	15	50	25	-	100
23BTECLXX 23BTECPXX	Program Elective II	PEC 2	3	-	2	5	4	10	15	50	25	-	100
23BTECLXX	Program Elective III	PEC 3	4	-	-	4	4	10	15	50	-	-	75
23BTECLXX 23BTECPXX	Vocational and Skill Enhancement Elective –IV	VSEC 4	1	-	2	3	2	10	15	-	25	-	50
23BTXXXXX	Multidisciplinary Minor	MDM 4	2	-	-	2	2	10	15	50	-	-	75
23BTSHP302	Research Ethics & Technical Writing	RM	-	-	4	4	2	-	-	-	50	-	50
TOTAL			**14**	1	**12**	**27**	**21**	**60**	**90**	**250**	**150**	**25**	**575**

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Course	Offered to Department	Name of Subject	Course Code
Program Elective II	ETC	System on Chip	23BTECL310 23BTECP310
		CMOS VLSI Design	23BTECL311 23BTECP311
		Advanced Embedded System	23BTECL312 23BTECP312
Program Elective III	ETC	Wireless and Mobile Communication	23BTECL313
		Audio and Speech Signal Processing	23BTECL314
		Mechatronics	23BTECL315
Vocational and Skill Enhancement Elective – IV	ETC	Introduction to JAVA Programing	23BTXXXXX
		Python for AI	23BTXXXXX
Multidisciplinary Minor (MDM 4)	Other than ETC	Introduction to Wireless Communication	23BTECL316XX

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Course Code	Name of Course	Course Category	Teaching Scheme				Credits	Evaluation Scheme					
								Theory			Practical		Total Marks
			L	T	P	Total Hours		TAE	CAE	ESE	INT	EXT	
SEMESTER-VII													
23BTECL401 23BTECP401	Microwave and Antennas	PCC 11	3	-	2	5	4	10	15	50	25	-	100
23BTECL402 23BTECP402	Digital Image Processing	PCC 12	3	-	2	5	4	10	15	50	25	25	125
23BTECL403 23BTECP403	Optical Communication	PCC 13	2	-	2	4	3	10	15	50	25	-	100
23BTECLXX	Program Elective IV	PEC 4	4	-	-	4	4	10	15	50	-	-	75
23BTECLXX 23BTECPXX	Multidisciplinary Minor	MDM 5	4	-	-	4	4	10	15	50	-	-	75
23BTECP404	Project	P	-	-	8	8	4	-	-	-	50	50	100
		TOTAL	**16**	**-**	**14**	**30**	**23**	**50**	**75**	**250**	**125**	**75**	**575**

Course	Offered to Department	Name of Subject	Course Code
Program Elective IV	ETC	Radar and Satellite Communication	23BTECL406
		Wireless Sensor Network	23BTECL407
		MEMS and Applications	23BTECL408
		Analog VLSI Design	23BTECL409
Multidisciplinary Minor (MDM 5)	Other than ETC	Introduction to Wireless Sensor Network	23BTECL410XX

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Course Code	Name of Course	Course Category	Teaching Scheme				Credits	Evaluation Scheme					
								Theory			Practical		Total Marks
			L	T	P	Total Hours		TAE	CAE	ESE	INT	EXT	
SEMESTER-VIII													
23BTECP405	Internship	I	-	-	24	24	12	-	-	-	200	100	300
23BTECLXX	Program Elective V (MOOC's Based)	PEC 4	4	-	-	4	4	10	15	50	-	-	75
		TOTAL	**04**	**-**	**24**	**28**	**16**	**10**	**15**	**50**	**200**	**100**	**375**