### PROGRAMME - DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING PROGRAMME STRUCTURE

#### **SCHEME AT A GLANCE**

Level	Name of Level	Total Number of Courses offered	Number of Courses to be completed	тн	TU	PR	Total Hours	Total Credit s	Marks
Level-1	Foundation Courses	10	10 Compulsory	17	01	18	36	27	950
Level-2	Basic Technology Courses	07	07 Compulsory	22		18	40	31	1150
Level-3	Allied courses	06	04 (03 Compulsory +01 Electives)	06		06	12	09	250
Level-4	Applied Technology Courses	09	09 Compulsory	19		16	35	41	1200
Level-5	Diversified Courses	09	03 (01 Compulsory +02 Electives)	09		06	15	12	450
то	<b>DTAL</b>	41	30 compulsory +03 Electives 33	73	01	64	138	120	
Audit	Courses	04	04	06		02	08		
Gran	d Total	45	37	79	01	66	146	120	4000

#### **Abbreviations:**

TH: Theory, TU: Tutorial, PR: Practical.

## PROGRAMME - DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING PROGRAMME STRUCTURE LEVEL - 1 FOUNDATION COURSES

			_		TE/	CHI	NG SCHE	ME		EXA	AMINA	TIO	N SC	HEME	
Sr. No.	Course Code	Course Title	Course Abbr.	Н	lours	per '	Week	Total		eory aper	Task	PR	OD	T)4/	Tatal
				ТН	TU	PR	Total Hours	Credits	Hrs	Mark	Test	PK	OR	TW	Total
01	21101	Communicatio n Skills	CMS	02		02	04	03	03	80	20		ı	50	150
02	21102	Engineering Mathematics	EMT	02	01		03	03	03	80	20		-		100
03	21103	Applied Mathematics	AMT	03			03	03	03	80	20		I		100
04	21104	Applied Physics	PHY	03		02	05	04	02	80#	20#		1	50	150
05	21105	Applied Chemistry	CHY	03		02	05	04	02	80#	20#		I	50	150
06	21107	Engineering Graphics	EGR			04	04	02	-	I			ŀ	50	50
07	21109	Workshop Practice	WSP			04	04	02	-	I	-		I	50	50
08	21110	Introduction to IT Systems	ITS			02	02	01	-	I	-		ŀ	50	50
09	21113	Electronic Workshop Practice	EWP	01		02	03	02					1	50	50
10	21114	Electronic Materials and Components	EMC	03			03	03	03	80	20		1	1	100
	TO	TAL		17	01	18	36	27		480	120			350	950

Level: 1

Total Courses : 10 Total Credits : 27 Total Marks : 950

**Abbreviations:** 

Abbr: Course Abbreviation, TH: Theory, TU: Tutorial, PR: Practical, OR: Oral, TW: Term Work

#### **Course code Indication:**

First two digit : Indicates last two digits of Year of Implementation of Curriculum

Third digit : Indicates Level.

Fourth & fifth digit : Indicates Course Number.

#### Assessment of PR / OR / TW:

1) All orals & practicals are to be assessed by external & internal examiners.

2) TW are to be assessed by internal examiners.

3) # indicates Online theory Examination

#### PROGRAMME - DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING **PROGRAMME STRUCTURE** LEVEL - 2 **BASIC TECHNOLOGY COURSES**

					TEA	CHI	NG SCH	EME	EXAMINATION SCHEME								
Sr. No.	Course Code	Course Title	Course Abbr.	Н	ours	per '	Week	Total		eory aper	Toot	DD	OD	T)4/	Total		
				тн	TU	PR	Total Hours	Credits	Hrs	Mark	Test	PR	OR	TW	iotai		
01	21242	Electrical Technology	ELT	03		02	05	04	03	80	20	ı	ł	50	150		
02	21243	Electronic Devices and Circuits	EDC	03		04	07	05	03	80	20	25	1	50	175		
03	21244	Electronic Measurements & Instrumentation	ELM	03		02	05	04	03	80	20		-	50	150		
04	21245	Digital Electronics	DEX	04		02	06	05	03	80	20	25		50	175		
05	21246	Linear Integrated Circuits	LIC	03		04	07	05	03	80	20	25	1	50	175		
06	21247	Analog Communication	ACO	03		02	05	04	03	80	20	I	25	50	175		
07	21248	Industrial Electronics & Applications	IEA	03		02	05	04	03	80	20	25		25	150		
	TOTAL			22		18	40	31		560	140	100	25	325	1150		

Level: 2

Total Courses : 07 Total Credits : 31 Total Marks : 1150

- All orals & practicals are to be assessed by external & internal examiners.
   TW are to be assessed by internal examiners.

# PROGRAMME - DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING PROGRAMME STRUCTURE LEVEL - 3 ALLIED COURSES

					TEA	CHI	NG SCHI	EME		EXAMINATION SCHEME								
Sr. No.	Course Code	Course Title	Course Abbr.	Hours per Week Tot			Total	Theory Paper		Test	PR	OB	TW	Total				
				TH	TU	PR	Total Hours	Credits	Hrs	Mark	rest	PK	OR	1 00	Total			
Con	npulsory	1																
01	21301	Entrepreneurship and Start-ups	EPS	01		02	03	02						50	50			
02	21308	Industrial Organization and Management	IOM	03			03	03	03	80	20				100			
03	21314	C Programming	CPG	01		02	03	02						50	50			
Elec	ctive I :	Any ONE of the fo	llowing															
	21306	Internet of Things	IOT	01		02	03	02						50	50			
04	21315	Python Programming	PYR	01		02	03	02		-	1			50	50			
	21316	Programming in JAVA	PJA	01		02	03	02						50	50			
	7	TOTAL		06		06	12	09	03	80	20			150	250			

#### Level: 3

Total Courses : 06 (Three Compulsory + One Elective)

Total Credits : 09 Total Marks : 250

- 1) All orals & practicals are to be assessed by external & internal examiners.
- 2) TW are to be assessed by internal examiners.

#### PROGRAMME - DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING PROGRAMME STRUCTURE LEVEL - 4

#### **APPLIED TECHNOLOGY COURSES**

			_		TE	ACHI	NG SCHE	ME	EXAMINATION SCHEME								
Sr. No.	Course Code	Course Title	Course Abbr.	Н	lours	s per	Week	Total		eory aper			0.0				
				тн	TU	PR	Total Hours	Credits	Hrs	Mark	Test	PR	OR	TW	Total		
01	21410	Industrial Training	ITR				#	14					100	100	200		
02	21411	Project	PRO			04	04	02					50	50	100		
03	21438	Applied Electronics	AET	03		02	05	04	03	80	20	25		25	150		
04	21439	Microcontroller & Interfacing Techniques	MCI	03		02	05	04	03	80	20	25		25	150		
05	21440	Consumer Electronics	CEX	03		02	05	04	03	80	20		25	25	150		
06	21441	Digital Communication System	DCS	04		02	06	05	03	80	20	1	25	25	150		
07	21442	Artificial Intelligence and Fuzzy Logic	AIC	03			03	03	03	80	20	1			100		
08	21443	Control System & PLC	CSP	03		02	05	04	03	80	20	1	25	25	150		
09	21444	EDA Tools	EDA			02	02	01				-		50	50		
	T	OTAL		19		16	35	41		480	120	50	225	325	1200		

#### Level: 4

Total Courses : 09 Total Credits : 41 Total Marks : 1200

- 1) All orals & practicals are to be assessed by external & internal examiners.
- 2) TW are to be assessed by internal examiners.
- 3) # indicates 04 hours/week for batch of 10 students (Will be as institute policy norms)

# PROGRAMME - DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING PROGRAMME STRUCTURE LEVEL - 5 DIVERSIFIED COURSES

					TEA	CHI	NG SCHI	EME		EXA	MINA	ΓΙΟΝ	SCH	EME	
Sr. No.	Course Code	Course Title	Course Abbr.	Н	ours	per \	Week	Total		eory aper	Test	PR	OR	TW	Total
				тн	TU	PR	Total Hours		Hrs	Mark	rest	PK	UK	1 00	TOLAI
Con	npulsory	•													
01	21544	Advance Communication System	ACS	03		02	05	04	03	80	20		25	25	150
Elec	tive II :	Any <b>TWO</b> of the fo	ollowing												
	21545	Embedded System	EMS	03		02	05	04	03	80	20		25	25	150
	21546	VLSI Techniques	VLT	03		02	05	04	03	80	20		25	25	150
	21547	Computer Networking and Data Communication	CDC	03		02	05	04	03	80	20	-	25	25	150
02	21548	Microwave & RADAR	MAR	03		02	05	04	03	80	20		25	25	150
	21549	Optical Communication	OPC	03		02	05	04	03	80	20	I	25	25	150
	21550	Mechatronics	MET	03		02	05	04	03	80	20		25	25	150
	21551	Robotics Systems	RST	03		02	05	04	03	80	20	-	25	25	150
	51552	Industrial Automation	INA	03		02	05	04	03	80	20		25	25	150
	T	OTAL		09		06	15	12		240	60		75	75	450

Total Courses: 09
Total Credits: 12
Total Marks: 450

- 1) All orals & Practicals are to be assessed by external & internal examiners.
- 2) TW to be assessed by internal examiners.

## PROGRAMME - DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING PROGRAMME STRUCTURE AUDIT COURSES

Sr. No.	Course Code	Course Title	Course Abbr.	Contact Hours Per Week (TH)	Contact Hours Per Week (PR)	Total Contact Hours Per Week	Total Credits
01	21001	Environmental science	EVS	02		02	
02	21002	Sports and Yoga	SPY		02	02	
03	21003	Essence of Indian Knowledge and Tradition	IKT	02		02	
04	21004	Indian Constitution	ICN	02		02	
		TOTAL		06	02	08	

Total Courses : 04
Total Credits : Nil
Total Marks : --

### PROGRAMME - DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING PROGRAMME STRUCTURE

COURSES FOR AWARD OF CLASS

		ı		COURSES FOR AWARD OF												
			_		TEAG	CHIN	G SCHE	ME		EX	AMIN	IATIO	ON SCH	IEME		
Sr. No.	Course Code	Course Title	Course Abbr.					Total Credit		eory aper	Test	PR	OR	TW	Total	
				тн	TU	PR	Total Hours	S	Hrs	Mark	1630	FK	OK	1 00	Total	
Cor	npulsor	У														
01	21248	Industrial Electronics & Applications	IEA	03	-	02	05	04	03	80	20	25		25	150	
02	21308	Industrial Organization and Management	IOM	03			03	03	03	80	20				100	
03	21410	Industrial Training	ITR			#		14					100	100	200	
04	21411	Project	PRO			04	04	02					50	50	100	
05	21439	Microcontroller & Interfacing Techniques	MCI	03		02	05	04	03	80	20	25		25	150	
06	21440	Consumer Electronics	CEX	03		02	05	04	03	80	20		25	25	150	
07	21441	Digital Communication System	DCS	04		02	06	05	03	80	20		25	25	150	
08	21442	Artificial Intelligence and Fuzzy Logic	AIC	03			03	03	03	80	20				100	
09	21443	Control System & PLC	CSP	03		02	05	04	03	80	20		25	25	150	
10	21544	Advance Communication System	ACS	03		02	05	04	03	80	20		25	25	150	
Elec	tive II :	Any <b>TWO</b> of the f	following	)												
	21545	Embedded System	EMS	03		02	05	04	03	80	20		25	25	150	
	21546	VLSI Techniques	VLT	03		02	05	04	03	80	20		25	25	150	
	21547	Computer Networking and Data Communication	CDC	03	-	02	05	04	03	80	20		25	25	150	
	21548	Microwave & RADAR	MAR	03		02	05	04	03	80	20		25	25	150	
	21549	Optical Communication	OPC	03		02	05	04	03	80	20		25	25	150	
	21550	Mechatronics	MET	03	1	02	05	04	03	80	20		25	25	150	
	21551	Robotics Systems	RST	03		02	05	04	03	80	20		25	25	150	
	51552 Industrial Automation		INA	03		02	05	04	03	80	20		25	25	150	
	T	OTAL  Ourses : 12		31		20	51	55		800	200	50	300	350	1700	

Total Courses : 12 Total Credits : 55 Total Marks : 1700

- Assessment of PR / OR / TW:

  1) All orals & Practicals are to be assessed by external & internal examiners.

  2) TW to be assessed by internal examiners only.

### PROGRAMME - DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING SAMPLE PATH ENTRY LEVEL- 10+

Nature of	First	Year	Seco	nd Year	Third	Year	T-4-1
Course	Odd Term	Even Term	Odd Term	Even Term	Odd Term	Even Term	Total
	21101 (03) CMS	21103 (03) AMT	21243 (05) EDC	21247 (04) ACO	21441 (05) DCS	21410(14) ITR	
	21102 (03) EMT	21105 (04) CHY	21244(04) ELM	21308 (03) IOM	21544 (04) ACS		-
	21104 (04) PHY	21110 (01) ITS	21245 (05) DEX	21440 (04) CEX	21443 (04) CSP		
Compulsory	21113 (02) EWP	21114 (03) EMC	21246 (05) LIC	21438 (04) AET	21444 (01) EDA		
	21109(02) WSP	21242 (04) ELT	21442 (03) AIC	21439 (04) MCI	21411 (02) PRO		
		21107 (02) EGR	21314 (02) CPG	21248 (04) IEA			
			21301 (02) EPS				
Total credits (Compulsory)	14	17	26	23	16	14	110
Elective				Any ONE from Elective : I 21306 IoT 21315 PYR 21316 PJA (02)	I) Any <b>TWO</b> from <b>Elective :II</b> 21545 EMS 21546 VLT 21547 CDC 21548 MAR 21549 OPC 21550 MET 21551 RST 21552 INA : <b>(04+04)</b>		
Elective			Nil	01	02		03
Total Credits (Elective)	Nil	Nil	Nil	02	08	00	10
<b>Total Courses</b>	05	06	07	07	07	01	33
Audit Courses	21002 SPY (00)	21001 EVS(00)	21003 IKT(00)	21004 ICN(00)	00	00	00
Total Credits (Compulsory + Elective)	14	17	26	25	24	14	120
Grand Total of Credits							120

Note: Figures in bracket indicates total credits.