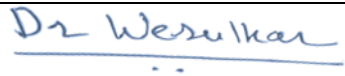





ANNEXURE – I

Credit Structure for Undergraduate programs

Sr. No.	Category Code	Category	Credits
1	HSSM	Ability Enhancement Course (AEC), Indian Knowledge System (IKS), Value Education Course (VEC), Entrepreneurship/Economics/Management courses	10
2	BSC	Basic Science courses	14
3	ESC	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc.	16
4	PCC	Professional core courses	70
5	PEC	Professional Elective courses relevant to chosen specialization/branch	9
6	OE	Open subjects – Electives from other technical and /or emerging subjects	8
7	ELC	Project work, seminar and internship in industry or elsewhere, Industry Training and Skill Development, Capstone Course	22
8	VSEC	Vocations Skill Courses (VSC) , Skill Enhancement Courses(SEC)	10
9	CC	Co-curricular Courses (CC) such as Health and Wellness, Yoga education sports, and fitness, Cultural Activities, NSS/NCC and Fine/ Applied/ Visual/ Performing Arts	04
10	MDM	Compulsory Multidisciplinary Minor	14
		TOTAL	176

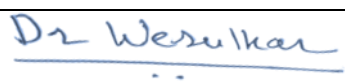

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B. Tech. Scheme of Examination & Syllabus 2023-24**ELECTRONICS AND TELECOMMUNICATION ENGINEERING****GROUP 1: SEMESTER I / GROUP 2: SEMESTER II**

Sr No	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
				L	T	P		Continual Assessment	End Sem Examination	Total
1	BSC	AS101T	Engineering Physics & Material Sciences	2	0	-	2	15	35	50
2	BSC	AS101P	Engineering Physics & Material Sciences Lab	-	-	2	1	25	25	50
3	BSC	AS102T	Applied Mathematics – I	4	-	-	4	30	70	100
4	ESC	AS103T	Engineering Practices-I (Electrical & Electronics)	3	-	-	3	30	70	100
5	ESC	AS103P	Engineering Practices-I Lab(Electrical & Electronics)	-	-	2	1	25	25	50
6	ESC	AS104T	Logic building with C	2	-	-	2	15	35	50
7	ESC	AS104P	Logic building with C Lab	-	-	2	1	25	25	50
8	AEC	AS105P	Business Communication Skills I Lab	-	-	2	1	25	25	50
9	IKS	AS106T	Indian Knowledge Systems	2	-	-	2	15	35	50
10	SEC	AS107T	Career Development I	-	-	2	1	50	-	50
11	PCC	ET101T	Program Foundation I	2	-	-	2	15	35	50
12	CC	AS108T	Co-curricular Course - I	-	-	-	2	50	-	50
Total				17	-	10	22	320	380	700

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ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR

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B. Tech. Scheme of Examination & Syllabus 2023-24

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

GROUP 1: SEMESTER II / GROUP 2: SEMESTER I

Sr No	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
				L	T	P		Continual Assessment	End Sem Examination	Total
1	BSC	AS201T	Engineering Chemistry & Environmental Science	2	-	--	2	15	35	50
2	BSC	AS201P	Engineering Chemistry & Environmental Science Lab	-	-	2	1	25	25	50
3	BSC	AS202T	Applied Mathematics–II	4	-	-	4	30	70	100
4	ESC	AS203T	Engineering Practices-II (Civil & Mechanical)	3	-	-	3	30	70	100
5	ESC	AS203P	Engineering Practices-II Lab (Civil & Mechanical)	-	-	2	1	25	25	50
6	ESC	AS204T	Problem Solving with Python	2	-	-	2	15	35	50
7	ESC	AS204P	Problem Solving with Python Lab	-	-	2	1	25	25	50
8	AEC	AS205P	Business Communication Skills II Lab	-	-	2	1	25	25	50
9	SEC	AS206T	Career Development II	-	-	2	1	50	-	50
10	PCC	ET201T	Program Foundation II	2	-	-	2	15	35	50
11	ESC	AS207T	Design Thinking	2	-	-	2	30	70	100
12	CC	AS208T	Co-curricular Course - I	2	-	-	2	50	-	50
Total				17	-	10	22	345	405	750

<u>Dr. Wesulkar</u>	<u>M. Shinde</u>	July 2023	1.0	Applicable for 2023-24
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ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

B. Tech. Scheme of Examination & Syllabus 2023-24

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SEMESTER III

Sr No	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
				L	T	P		Continual Assessment	End Sem Examination	Total
1	BSC	ET301T	Mathematics III	3	-	-	3	30	70	100
2	PCC	ET302T	Electronic Devices & Circuits	3	-	-	3	30	70	100
3	PCC	ET302P	Electronic Devices & Circuits lab	-	-	2	1	25	25	50
4	PCC	ET303T	Digital Electronics	3	-	-	3	30	70	100
5	PCC	ET30P	Digital Electronics Lab	-	-	2	1	25	25	50
6	PCC	ET304T	Electronics Measurement and Instrumentation	3	-	-	3	15	35	50
7	PCC	ET304P	Electronics Measurement and Instrumentation lab	-	-	2	1	25	25	50
8	PCC	ET305T	Network Theory	3	-	-	3	30	70	100
9	SEC	ET306P	Career Development III	-	-	2	1	50	-	50
10	VEC	ET307T	Value Education Course I	2	-	-	2	15	35	50
11	ELC	ET306P	Micro Project I*	-	-	2	1	50	-	50
Total				17	-	10	22	325	425	750
12	MDM		Multidisciplinary Minor - I	2	-	-	2	15	35	50
Total				19	-	10	24	340	460	800

* Field Project or Community engagement project in the major discipline

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(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

B. Tech. Scheme of Examination & Syllabus 2023-24

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SEMESTER IV

Sr No	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
				L	T	P		Continual Assessment	End Sem Examination	Total
1	PCC	ET401T	Electromagnetic Fields	3	-	-	3	30	70	100
2	PCC	ET402T	Analog Circuits	3	-	-	3	30	70	100
3	PCC	ET402P	Analog Circuits lab	-	-	2	1	25	25	50
4	PCC	ET403T	Microprocessor & Microcontroller	3	-	-	3	30	70	100
5	PCC	ET403P	Microprocessor & Microcontroller lab	-	-	2	1	25	25	50
6	PCC	ET404T	Signals & Systems	3	-	-	3	30	70	100
7	OE	ET405T	Open Elective - I	2	-	-	2	15	35	50
8	VSC	ET406T	Technical Skill Development - I	2	-	-	2	50	-	50
9	VEC	ET407T	Value Education Course II	2	-	-	2	15	35	50
10	SEC	ET408T	Career Development - IV	2	-	-	1	50	-	50
11	ELC	ET409P	Micro Project II*			2	1	50	-	50
Total				20	-	6	22	350	400	750
	MDM		Multidisciplinary Minor - II	3	-	-	3	30	70	100
Total				23	-	6	25	380	470	850

* Field Project or Community engagement project in the major discipline

Open Elective - I	
ET405T	Consumer Electronics

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B. Tech. Scheme of Examination & Syllabus 2023-24

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SEMESTER V

Sr No	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
				L	T	P		Continual Assessment	End Sem Examination	Total
1	PCC	ET501T	Analog & Digital Communication	3	-	-	3	30	70	100
2	PCC	ET501P	Analog & Digital Communication lab	-	-	2	1	25	25	50
3	PCC	ET502T	Introduction to IoT	3	-	-	3	30	70	100
4	PCC	ET502P	Introduction to IoT lab	-	-	2	1	25	25	50
5	PCC	ET503T	Computer communication network	3	-	-	3	30	70	100
6	PCC	ET503P	Computer communication network lab	-	-	2	1	25	25	50
7	PCC	ET504P	Circuit Simulation & Coding Lab	-	-	2	1	25	25	50
8	PEC	ET505T	Professional Elective course -I	3	-	-	3	30	70	100
9	OE	ET506T	Open Elective - II	3	-	-	3	30	70	100
10	VSC	ET507T	Technical Skill Development - II	2	-	-	2	50	-	50
11	SEC	ET508P	Career Development - V	-	-	2	1	50	-	50
Total				17		10	22	350	450	800
12	MDM		Multidisciplinary Minor - III	3	-	-	3	30	70	100
Total				20	-	10	25	380	520	900

ET506T	Professional Elective course -I
ET505T(i)	Information Theory and Coding
ET505T(ii)	Smart sensor
ET505T(iii)	Power Electronics
ET505T(iv)	Wireless communication

Open Elective - II	
ET506T	Introduction to Solar Photovoltaic systems

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ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR
(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

B. Tech. Scheme of Examination & Syllabus 2023-24

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SEMESTER VI

Sr No	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
				L	T	P		Continual Assessment	End Sem Examination	Total
1	PCC	ET601T	Digital Signal Processing	3	-	-	3	30	70	100
2	PCC	ET601P	Digital Signal Processing lab	-	-	2	1	25	25	50
3	PCC	ET602T	Digital system design	3	-	-	3	30	70	100
4	PCC	ET602P	Digital system design lab	-	-	2	1	25	25	50
5	PCC	ET603T	OOPS and DS	3	-	-	3	15	25	50
6	PCC	ET603P	OOPS and DS Lab	-	-	2	1	25	25	50
7	PEC	ET604T	Professional Elective course -II	3	-	-	3	30	70	100
8	AEC	AS601T	Economics. & Management	2	-	-	2	15	35	50
9	OE	ET605T	Open Elective- III	3	-	-	3	30	70	100
10	ELC	ET606P	Project - I	-	-	2	1	50	50	100
11	SEC	ET607P	Career Development -VI	-	-	2	1	50	-	50
Total				17	-	10	22	325	465	800
12	MDM		Multidisciplinary Minor - IV	3	-	-	3	30	70	100
Total				20	-	-	25	355	535	900

Professional Elective course -II	
ET604T(i)	Antenna and Wave Propagation
ET604T9(ii)	Data base management system
ET604T9(iii)	Control Systems
ET604T(iv)	Wireless Sensors Network

Open Elective - III	
ET606T	Bio Medical Electronics

SEMESTER VII

<i>Dr. Wesulkar</i>	<i>mschpande</i>	July 2023	1.0	Applicable for 2023-24
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ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

B. Tech. Scheme of Examination & Syllabus 2023-24

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

Sr No	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
				L	T	P		Continual Assessment	End Sem Examination	Total
1	PCC	ET701T	Microwave theory & Technique	3	-	-	3	30	70	100
2	PCC	ET702P	Microwave theory & Technique lab	-	-	2	1	25	25	50
3	PCC	ET702T	Embedded system	3	-	-	3	30	70	100
4	PCC	ET702P	Embedded system lab	-	-	2	1	25	25	50
5	PCC	ET703T	VLSI Design	3	-	-	3	30	70	100
6	PCC	ET703P	VLSI Design lab	-	-	2	1	25	25	50
7	PEC	ET704T	Professional Elective Course -III	3	-	-	3	30	70	100
8	ELC	ET705P	Project - II	-	-	8	4	50	50	100
9	ELC	ET706P	Summer / Winter Internship*	-	-	-	2	50	--	50
Total				12	-	14	21	295	405	700
10	MDM		Multidisciplinary Minor - V	3	-	-	3	30	70	100
Total				15	-	14	24	325	475	800

* Summer / Winter Internship (Evaluation of Four Weeks Internship Completion till 6th Semester)

Professional Elective Course -III	
ET704T(i)	Optical Fiber Communication
ET704T(ii)	Testing and Verification of VLSI circuits
ET704T(iii)	Industrial Applications of Microcontroller
ET704T(iv)	Digital Image Processing

SEMESTER VIII

<i>Dr. Wesulkar</i>	<i>M. Shinde</i>	July 2023	1.0	Applicable for 2023-24
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(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

B. Tech. Scheme of Examination & Syllabus 2023-24**ELECTRONICS AND TELECOMMUNICATION ENGINEERING****Option A**

Sr No	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
				L	T	P		Continual Assessment	End Sem Examination	Total
1	ELC	ET801P*	Project based on one semester internship in Industry/Research Institute/ National Laboratories/ Incubation Center	-	-	-	12	300	100	400
Total				0	0	0	12	300	100	400

*End semester examination will consist of evaluation of seminar & project report.

Option B

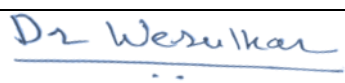

Sr No	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
				L	T	P		Continual Assessment	End Sem Examination	Total
1	ELC	Et801P#	Institutional Internship	-	-	12	6	100	100	200
2	ELC	Et802P	Project – III	-	-	12	6	100	100	200
Total				0	0	0	12	300	100	400

Option B is available to students only after recommendation of the concerned Head of the department. The project and internship should contribute towards career development plan of the students.

* Minimum 90 days internship in any industry and project is to be carried out during internship.

Two NPTEL courses (as per choice of student) or Institutional Internship by IEDC, SVP CET.

EXIT OPTIONS

		July 2023	1.0	Applicable for 2023-24
Chairman - BoS	Dean – Academics	Date of Release	Version	



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(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

B. Tech. Scheme of Examination & Syllabus 2023-24

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

Award of UG Certificate in Major with 44 credits and an additional 8 credits (After First Year)

EXIT COURSES			
S.N.	Course name	Mode of conduction	Credits
1	Consumer Electronics	Offline/online/internship	3
2	Electronic Servicing & maintenance	Offline/online/internship	3
3	Word processing, spread sheet and power point presentation	Offline/online/internship	2

Award of UG Diploma in Major with 84 credits and an additional 8 credits (After Second Year)



EXIT COURSES			
*Any two			
S.N.	Course name	Mode of conduction	Credits
1	Troubleshooting of electronic system	Offline/online/internship	4
2	PCB designing and simulation	Offline/online/internship	4
3	Mobile servicing and maintenance	Offline/online/internship	4

Award of UG Degree in Major with 132 credits and an additional 8 credits (After Third Year)

EXIT COURSES			
S.N.	Course name	Mode of conduction	Credits
1	Embedded system design	Offline/online/internship	4
2	VLSI system design	Offline/online/internship	4

Multidisciplinary Minor

Minor 1: - Management

		July 2023	1.0	Applicable for 2023-24
Chairman - BoS	Dean – Academics	Date of Release	Version	

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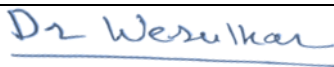

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B. Tech. Scheme of Examination & Syllabus 2023-24**ELECTRONICS AND TELECOMMUNICATION ENGINEERING**

Sr No	Sem	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
					L	T	P		Continual Assessment	End Sem Examination	Total
1		MDM									
2		MDM									
3		MDM									
4		MDM									
				Total				14			

Multidisciplinary Minor**Minor 2 :- Emerging Trends**

Sr No	Sem	Course Category	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
					L	T	P		Continual Assessment	End Sem Examination	Total
1		MDM									
2		MDM									
3		MDM									
4		MDM									
				Total				14			

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