This is to certify that the Syllabus Handbook of B.Tech (Electronics and Telecommunication Engineering), has been reviewed and endorsed by the Board of Studies, Academic Council and Governing Body. The syllabus has been thoroughly examined and is in alignment with the academic and professional standards set forth by the University and relevant regulatory bodies.

It is hereby recommended for implementation with effect from the academic year 2025-26. This certificate serves as formal approval of the contents of the handbook and authorizes its distribution to students and faculty.

Course Structure-B.Tech Electronics and Telecommunication

Semester – III **Batch:** A.Y 2025-2026 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week) L	T	P	C	Formative Assessment CIA Course	Formative Assessment CIA Laboratory	Summative Assessment ESE Course	Summative Assessment ESE Laboratory	Total Marks
1	PCC	NYEC301	Semiconductor Devices & Circuits	3	--	--	3	50	--	100	--	100
2	PCC	NYEC302	Digital Circuits	3	--	--	3	50	--	100	--	100
3	PCC	NYEC303	Network Theory	3	--	--	3	50	--	100	--	100
4	OE	--	Open Elective-I #	3	--	--	3	50	--	100	--	100
5	MDM	--	Minor course I #	2	--	--	2	50	--	100	--	100
6	MDM	--	Minor course I # Laboratory	--	--	2	1	--	50	--	50	100
7	PCC	NYEC311	Semiconductor Devices & Digital Circuits Laboratory	--	--	2	1	--	50	--	50*	100
8	VEC (HSSM)	NLWV01	The Constitution & Human Rights	2	--	--	1	50	--	100	--	100
9	VSEC	NYEC312	Basics of IOT using Python Programming & Introduction to AI Tools	--	--	2	1	--	50	--	50*	100
10	AEC (HSSM)	NHSA11	Key Competencies for Career Growth	--	--	4	2	--	50	--	50*	100
11	CEP/FP	NYEC313	Community Engagement Project*/Field Project*	--	--	4	2	--	50	--	50*	100
			TOTAL	**16**	**--**	**14**	**22**	**300**	**250**	**600**	**250**	**1100**
			Value Added Course									
12	VAC	--	Identification And Testing of Electronic Components And Devices	--	--	2	--	--	--	--	--	--

- **Note: For Open Elective I refer Annexure II and For Minor Course (MDM) refer Annexure III**

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*****: Oral Examination **PCC**: Program Core course **PEC**: Programme elective Core **OE:**Open Elective **VAC:** Value Added Courses **AEC :**AbilityEnhancement curses **CEP/FP:**Communityencougement project/Field project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary minor course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioural Attitude + General Discipline (5%) • Theory + practical attendance 5%)
		TOTAL	**50%**	

Course Structure-B.Tech Electronics and Telecommunication

Semester – IV   **Batch:** A.Y 2025-2026 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week) L	T	P	C	Formative Assessment CIA Course	Formative Assessment CIA Laboratory	Summative Assessment ESE Course	Summative Assessment ESE Laboratory	Total Marks
1	PCC	NYEC401	Analog and Digital Communication	3	--	--	3	50	--	100	--	100
2	PCC	NYEC402	Computer Communication Networks	3	--	--	3	50	--	100	--	100
3	PCC	NYEC403	Signal and systems	3	--	--	3	50	--	100	--	100
4	PCC	NYEC411	Analog and Digital Communication Laboratory	--	--	2	1	--	50	--	50*	100
5	OE	--	Open Elective-II #	3	--	--	3	50	--	100	--	100
6	VSEC	NYEC412	Skill Based Laboratory (Matlab)	--	--	2	1	--	50	--	50*	100
7	MDM	--	Minor course 2 #	2	--	--	2	50	--	100	--	100
8	PCC	NYEC413	Computer Communication Networks Laboratory	--	--	2	1	--	50	--	50*	100
9	AEC (HSSM)	NYEC414	Reasoning and Aptitude Development	--	--	4	2	--	50	--	50*	100
10	VEC (HSSM)	NHSA12	Strategic Communication for Professionals	--	--	4	2	--	50	--	50*	100
			TOTAL	**14**	**--**	**14**	**21**	**250**	**250**	**500**	**250**	**1000**
			Value Added Course									
11	VAC	--	PCB Design & Simulation	--	--	2	--	--	--	--	--	--

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*****: Oral Examination **PC**: Program Core course **PEC**: Programme elective Core **OE:** Open Elective **VAC:** Value Added Courses **AEC :** AbilityEnhancement curses **CEP/FP:** Communityencougement project/Field project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary minor course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioural Attitude + General Discipline (5%) • Theory + practical attendance 5%)
		TOTAL	**50%**	

- **Note: For Open Elective I refer Annexure II and For Minor Course (MDM) refer Annexure III**

Students exiting the Second Year Programme after **securing minimum 80 credits** will be awarded **UG Diploma** in the relevant Discipline /Subject provided they **secure additional 8 credits** in skill-based vocational courses (skill-based courses, internship, mini projects etc) offered during summer vacation after the second year.

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SANDIP UNIVERSITY
School of Engineering and Technology
Department of Electronics and Telecommunication Engineering

Course Structure-B.Tech Electronics and Telecommunication

Semester – V   **Batch:** A.Y 2025-2026 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Laboratory	Course	Laboratory	
1	PCC	NYEC501	Power Electronics	3	--	--	3	50	--	100	--	100
2	PCC	NYEC502	Digital Signal Processing	3	--	--	3	50	--	100	--	100
3	PCC	NYEC503	Electromagnetic Field Theory	3	--	--	3	50	--	100	--	100
4	PEC	NYECE01-05	Program Elective-I	3	--	--	3	50	--	100	--	100
5	OE	--	Open Elective-III #	2	--	--	2	50	--	100	--	100
6	MDM	--	Minor course 3 #	3	--	--	3	50	--	100	--	100
7	MDM	--	Minor course 3 # Laboratory	--	--	2	1	--	50	--	50	100
8	VSEC	NYEC511	Digital Signal Processing Laboratory	--	--	2	1	--	50	--	50*	100
9	AEC (HSSM)	NHSA13	Essential Aptitude Skills	--	--	4	2	--	50	--	50	100
Total				**17**	**--**	**08**	**21**	**300**	**150**	**600**	**150**	**900**
Value Added Course												
11	VAC	--	PC Hardware & Computer Networking	--	--	2	--	--	--	--	--	--

- **Note: For Open Elective I refer Annexure II and For Minor Course (MDM) refer Annexure III**

		Formative Assessment		
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		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioural Attitude + General Discipline (5%) • Theory + practical attendance 5%)
		TOTAL	**50%**	

Course Structure-B.Tech Electronics and Telecommunication

Semester – VI   **Batch:** A.Y 2025-2026 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Laboratory	Course	Laboratory	
1	PCC	NYEC601	Computer Communication Network	3	--	--	3	50	--	100	--	100
2	PCC	NYEC602	Fibre Optical Communication	3	--	--	3	50	--	100	--	100
3	PCC	NYEC603	Control System	2	--	--	2	50	--	100	--	100
4	PEC	NYECE06-10	Program Elective-II	3	--	--	3	50	--	100	--	100
5	PEC	NYECE11-15	Program Elective-III	3	--	--	3	50	--	100	--	100
6	MDM	--	Minor course 4 #	2	--	--	2	50	--	100	--	100
7	PCC	NYEC611	Power Devices and Circuits Laboratory	--	--	2	1	--	50	--	50*	100
8	PCC	NYECM14	Minor course 4 # Laboratory	--	--	2	1	--	50	--	50*	100
9	PCC	NYEC612	Optical Commnication Laboratory	--	--	2	1	--	50	--	50*	100
10	VSEC	NYEC613	Mini Project	--	--	4	2	--	50	--	50*	100
11	AEC	NHSA14	Employability Skills and Career Advancement	--	--	2	1	--	50	--	50*	100
			TOTAL	**16**	**--**	**12**	**22**	**300**	**250**	**600**	**250**	**1100**
			Value Added Course									
12	VAC	--	Raspberry Pi Programming and Interfacing	--	--	2	--	--	--	--	--	--

- **Note: For Open Elective I refer Annexure II and For Minor Course (MDM) refer Annexure III.**

  Students exiting the 3-year UG program will be awarded **B.Voc.** in the relevant Discipline /Subject upon **securing minimum 120 credits** with **additional 8 credits** in skill-based vocational courses (skill-based courses, internship, mini projects etc.) offered during summer vacation after the sixth semester.

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CIA: Continuous Internal Assessment
L: Theory Lecture
T: Tutorial
P: Practical
ESE: End Semester Exam

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*: Oral Examination
PC: Program Core course
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VAC: Value Added Courses
AEC : AbilityEnhancement curses
CEP/FP: Communityencougement project/Field project
VSEC: Vocational and Skill Enhancement Course
MDM: Multidisciplinary minor course

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Formative Assessment

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CIA

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Weightage

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Description

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CIA	Weightage	Description
CIA 1	10%	Home Assignment
CIA 2	20%	Written Exam
CIA 3	10%	Seminar Presentation
CIA 4	10%	- Behavioural Attitude + General Discipline (5%) - Theory + practical attendance 5%)
TOTAL	**50%**	

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Course Structure- B.Tech Electronics and Telecommunication

Semester – VII   **Batch:** A.Y 2025-2026 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Laboratory	Course	Laboratory	
1	PCC	NYEC701	VLSI Design	3	--	--	3	50	--	100	--	100
2	PCC	NYEC702	Mobile Communication and Networks	2	--	--	2	50	--	100	--	100
3	PEC	NYECE16-19	Program Elective-IV	3	--	--	3	50	--	100	--	100
4	MDM	--	Minor course 5 #	2	--	--	2	50	--	100	--	100
5	PCC	NYEC711	VLSI Design Laboratory	--	--	2	1	--	50	--	50*	100
6	INT/OJT	NYEC712	INTERNSHIP/OJT*	--	--	--	12	--	50	--	50*	100
7	AEC	NHSA15	Corporate Readiness and Entrepreneurial Excellence	--	--	4	2	--	50	--	50*	100
			TOTAL	**10**	**--**	**6**	**25**	**200**	**150**	**400**	**150**	**700**
			Value Added Course									
8	VAC	--	Database Design and Programming with SQL	--	--	2	--	--	--	--	--	--

Note: For Open Elective I refer Annexure II and For Minor Course (MDM) refer Annexure III

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*****: Oral Examination **PC**: Program Core course **PEC**: Programme elective Core **OE:** Open Elective **VAC:** Value Added Courses **AEC :** AbilityEnhancement curses **CEP/FP:** Communityencougement project/Field project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary minor course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioural Attitude + General Discipline (5%) • Theory + practical attendance 5%)
		TOTAL	**50%**	

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Course Structure- B.Tech Electronics and Telecommunication
Semester – VIII   **Batch:** A.Y 2025-2026 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Laboratory	Course	Laboratory	
1	PCC	NYEC801	Satellite Communication	2	--	--	2	50	--	100	--	100
2	PCC	NYEC802	Electronics for Drone Technology	2	--	--	2	50	--	100	--	100
3	PEC	NYECE20-23	Program Elective-V	4	--	--	4	50	--	100	--	100
4	ELC	NYEC803	Research Methodology	4	--	--	4	--	50	--	50	100
5	PEC	NYECE24-28	Program Elective-VI	4	--	--	4	50	--	100	--	100
6	MDM	--	Minor course 6 #	2	--	--	2	50	--	100	--	100
7	CEP/FP	NYEC811	Project	--	--	8	4	--	50	--	100*	100
TOTAL				**18**	**--**	**8**	**22**	**250**	**100**	**500**	**150**	**700**
Value Added Course												
8	VAC	--	Antenna Design	--	--	2	--	--	--	--	--	--

		Formative Assessment		
CIA: Continuous Internal Assessment **L**: Theory Lecture **T**: Tutorial **P**: Practical **ESE**: End Semester Exam	*****: Oral Examination **PC**: Program Core course **PEC**: Programme elective Core **OE:**Open Elective **VAC:** Value Added Courses **AEC :**AbilityEnhancement curses **CEP/FP:**Communityencougement project/Field project **VSEC:** Vocational and Skill Enhancement Course **MDM:** Multidisciplinary minor course	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	• Behavioural Attitude + General Discipline (5%) • Theory + practical attendance 5%)
		TOTAL	**50%**	

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