



SANDIP
UNIVERSITY

School of Engineering and Technology
Department of Electronics and Telecommunication Engineering

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)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment		Summative Assessment		
								CIA		ESE		
								Course	Laboratory	Course	Laboratory	
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: Ability Enhancement courses CEP/FP: Community encouragement 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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12/07/2025



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School of Engineering and Technology

Department of Electronics and Telecommunication Engineering

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)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Laboratory	Course	Laboratory	
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		CIA	Weightage	Description
Assessment				CIA 1	10%	Home Assignment
Theory Lecture				CIA 2	20%	Written Exam
Tutorial				CIA 3	10%	Seminar Presentation
Practical				CIA 4	10%	- Behavioural Attitude + General Discipline (5%) - Theory + practical attendance 5%)
End Semester Exam				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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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
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								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			
CIA: Continuous Internal Assessment T: Theory Lecture 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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School of Engineering and Technology
Department of Electronics and Telecommunication Engineering

Course Structure-B.Tech Electronics and Telecommunication

Semester - VI

Batch: A.Y 2025-2026 onwards

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	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 Communication 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.

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

**Course Structure-B.Tech Electronics and
Telecommunication Engineering- VII**

Course Structure-B.Tech Electronics and Telecommunication Engineering- VII												
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	Lab	Course	Lab	
1	PC	17YEC701	Cloud Computing	3	0	0	3	50	-	100	-	150
2	PC	17YEC702	Fiber Optical Communication	3	0	0	3	50	-	100	-	150
4	PC	17YEC704	Project Management	3	0	0	3	50	-	100	-	150
3	PE	17YECE--	Programme Elective I	3	0	0	3	50	-	100	-	150
4	PE	17YECE--	Programme Elective II	3	0	0	3	50	-	100	-	150
5	PE	17YECE--	Programme Elective III	3	0	0	3	50	-	100	-	150
6	OE	17YECO--	Open Elective II	3	0	0	3	50	-	100	-	150
7	PC	17YEC713	Fiber Optical Communication Laboratory	0	0	2	1	-	50	-	50*	100
8	PC	17YEC714	Industrial Automation Lab	0	0	2	1	-	50	-	50*	100
9	PC	17YEC715	Project Stage I	0	0	4	2	-	50	-	100*	150
TOTAL				21	0	8	25	350	150	700	200	1400
Open Elective II												
1	OE	17YECO05	Embedded & RTOS	3	0	0	3	50	-	100	-	150
*Value Added Courses (Any One)												
1	VAC	VEC716	Industrial Automation*	0	0	4	2	-	50	-	-	50
2	VAC	VEC717	PCB Design and Fabrication*	0	0	4	2	50	-	-	-	50
3	VAC	VEC718	AI for Embedded Systems*	0	0	4	2	50	-	-	-	50

09/7/2020
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School of Engineering and Technology
Department of Electronics and Telecommunication Engineering

**Course Structure-B.Tech Electronics and
Telecommunication Engineering**

List of Program Electives

Course Code	Programme Elective I	Course Code	Programme Elective II	Course Code	Programme Elective III
17YECE01	Radiation and Microwave Theory	17YECE04	Satellite communication	17YECE08	Artificial Intelligence
17YECE02	Data Mining	17YECE05	Digital Image Processing	17YECE09	Wireless Sensor Network
17YECE03	Mobile Communication	17YECE07	Advance Control System	17YECE11	Robotics & Automation


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School of Engineering and Technology
Department of Electronics and Telecommunication Engineering

**Course Structure-B.Tech Electronics and
Telecommunication Engineering -VIII**

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	Lab	Course	Lab	
1	PC	17YEC811	Project Stage II	0	0	4	2	-	50	-	100*	150
2	UC	17YEC812	Internship III #	0	0	0	12	-	50	-	50*	100
TOTAL				00	00	04	14	--	100	--	150	250

				Formative Assessment		
CIA:	Continuous	Internal	#: Internship for 45 days.	CIA	Weightage	Description
Assessment			*: Oral Examination	CIA 1	10%	Home Assignment
L: Theory Lecture			UC: University Core	CIA 2	20%	Written Exam
T: Tutorial			PC: Programme Core	CIA 3	10%	Seminar Presentation
P: Practical			PE: Programme Elective	CIA 4	10%	Activity/Project & Research Based Activity
ESE: End Semester Exam			OE: Open Elective			
			VAC: Value Added Courses	TOTAL	50%	

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05/07/2018
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