

Nirma University, Ahmedabad
(Exam Section)

Revised Course code w.e.f. Academic Year: 2024-25 onwards

B. Tech. in EC Engineering
Semester - III

PROG	SEM	REVISED	EXISTING	COURSE_NAME	L_HOUR	T_HOUR	P_HOUR	CREDIT	CE_WT	PW_WT	SEE_WT
B. Tech.	3	2EC101CC23	2EC101	Electronic Devices and Circuits	2	0	2	3	0.3	0.3	0.4
B. Tech.	3	2EC201CC23	2EC201	Digital Logic Design	2	0	2	3	0.3	0.3	0.4
B. Tech.	3	2EC401CC23	2EC401	Signals and Systems	2	1	0	3	0.6	0	0.4
B. Tech.	3	2EC801CC23	2EC801	Mathematics for Electronics & Communication Engineering	2	1	0	3	0.6	0	0.4
B. Tech.	3	2HS302CC23	2HS302	Economics	2	1	0	3	0.6	0	0.4
B. Tech.	3	1MU803CC22	1MU803	Indian Constitution and Citizenship	2	1	0	3	0.6	0	0.4
B. Tech.	3	2FT901CC23	2FT901	Internship-Community Services	0	0	0	3	1	0	0

Semester - IV

PROG	SEM	REVISED	EXISTING	COURSE_NAME	L_HOUR	T_HOUR	P_HOUR	CREDIT	CE_WT	PW_WT	SEE_WT
B. Tech.	4	2EC102CC23	2EC102	Analog Electronics	2	0	2	3	0.3	0.3	0.4
B. Tech.	4	2EC701CC23	2EC701	Microcontroller and Interfacing	2	0	2	3	0.3	0.3	0.4
B. Tech.	4	2EC402CC23	2EC402	Digital Signal Processing	2	0	2	3	0.3	0.3	0.4
B. Tech.	4	2EC301CC23	2EC301	Communication Systems	2	0	2	3	0.3	0.3	0.4
B. Tech.	4	2EC202CC23	2EC202	FPGA based System Design	2	0	2	3	0.3	0.3	0.4
B. Tech.	4	2HS401CC23	2HS401	Organizational Behaviour	2	1	0	3	0.6	0	0.4

T: 1 JUL 2024

Deputy Registrar (Examination)
NIRMA UNIVERSITY
Sarkhej-Gandhinagar Highway
Ahmedabad- 382481 INDIA

NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
Teaching & Examination Scheme
Bachelor of Technology (Electronics & Communication Engineering)
Semester-V

w. e. f. Academic Year 2024-25

Course Code	Course Title	Teaching Scheme (hours/week)				Examination Scheme			
		L	T	P	C	Duration Hours	Component Weightage		
						SEE	CE	LPW	SEE
3EC601CC24	VLSI Design	3	0	2	4	3	0.3	0.3	0.4
3EC301CC24	Digital Communication	3	0	2	4	3	0.3	0.3	0.4
3EC302CC24	Electromagnetic & Wave Propagation	3	1	0	4	3	0.6	-	0.4
	Department Elective-I	3	1	0	4	3	0.6	-	0.4
	Core Course-I under Minor	3	1	0	4	3	0.6	-	0.4
		3	0	2			0.3	0.3	0.4
		2	0	4			0.3	0.3	0.4
		2	1	2			0.3	0.3	0.4
	Core Course-II under Minor	3	1	0	4	3	0.6	-	0.4
		3	0	2			0.3	0.3	0.4
		2	0	4			0.3	0.3	0.4
		2	1	2			0.3	0.3	0.4
	Total	-	-	-	24	-	-	-	-

L: Lectures, P/T: Practical / Tutorial, C: Credits, SEE: Semester End Examination
 LPW/PW: Laboratory / Project Work, CE: Continuous Evaluation

Department Elective-I (With Tutorial)

Sr. No.	Course Code	Course Title	L	T	P	C
1.	3EC602ME24	Semiconductor Device Physics & Modelling	3	1	0	4
2.	3EC401ME24	Image Processing	3	1	0	4
3.	3EC402ME24	Multimedia Systems @	3	1	0	4
4.	3EC303ME24	Satellite Communication	3	1	0	4
5.	3EC801ME24	Control Theory	3	1	0	4
6.	3EC603ME24	MEMS Design and Technology	3	1	0	4
7.	3EC701ME24	Data Structures for Embedded Programming	3	1	0	4
8.	3EC403ME24	Statistical Signal Processing	3	1	0	4
9.	3EC604ME24	Quantum Computing	3	1	0	4
10.	3EC901ME24	Optimisation Methods	3	1	0	4

@Multimedia System will not be offered to the students who have opted for Inter-Disciplinary Minor "Data Science" from CSE department

w.e.f. for first year students admitted in 2022-23 and D to D students admitted in 2023-24 onwards

NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
Teaching & Examination Scheme
Bachelor of Technology (Electronics & Communication Engineering)
Semester-VI

w. e. f. Academic Year 2024-25

Course Code	Title	Teaching Scheme (hours/week)				Examination Scheme			
		L	T	P	C	Durati on Hours	Component Weightage		
						SEE	CE	LP W	SEE
3EC503CC24	Computer Architecture	3	0	2	4	3	0.3	0.3	0.4
3EC705CC24	Embedded System	3	0	2	4	3	0.3	0.3	0.4
4FT901CC24	Research Methodology and Seminar*	2	0	0	-	-	0.5	-	-
	Department Elective-II	3	0	2	4	3	0.3	0.3	0.4
	Core course -III under Minor	3	1	0	4	3	0.6	-	0.4
		3	0	2			0.3	0.3	0.4
		2	0	4			0.3	0.3	0.4
		2	1	2			0.3	0.3	0.4
	Elective Course-I under Minor	3	1	0	4	3	0.6	-	0.4
		3	0	2			0.3	0.3	0.4
		2	0	4			0.3	0.3	0.4
		2	1	2			0.3	0.3	0.4
	Total	-	-	-	20	-	-	-	-
Internship									
3FT901CC24	#Summer Internship				6	-	-	1	-

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

#Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII

L: Lectures, P/T: Practicals / Tutorial, C: Credits, SEE: Semester End Examination
 LPW/PW: Laboratory / Project Work, CE: Continuous Evaluation

Department Elective-II (With Lab)

Sr. No.	Course Code	Course Name	L	T	P	C
1.	3EC605ME24	Testing and Verification of Digital Circuits	3	0	2	4
2.	3EC504ME24	Scripting Languages	3	0	2	4
3.	3EC305ME24	Wireless Communication	3	0	2	4

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NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
SCHOOL OF TECHNOLOGY
Teaching & Examination Scheme
BTech in Electronics & Communication Engineering

Semester-VII

w. e. f. Academic Year 2025-26

Course Code	Course Name	Teaching Scheme (hours/week)				Examination Scheme			
		L	T	P	C	Duration Hours	Component Weightage		
						SEE	CE	LP W	SEE
4EC301CC25	Data Communication and Network	3	0	2	4	3	0.3	0.3	0.4
4FT901CC24	Research Methodology and Seminar*	0	0	4	4	-	0.5	0.5	-
	Department Elective- III	3	0	2	4	3	0.3	0.3	0.4
	Department Elective- IV	3	1	0	4	3	0.6	-	0.4
	Elective Course -II in Minor	3	1	0	4	3	0.6	-	0.4
		3	0	2			0.3	0.3	0.4
		2	0	4			0.3	0.3	0.4
		2	1	2			0.3	0.3	0.4
	Total	-	-	-	20	-	-	-	-

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

w.e.f. for first year students admitted in 2022-23 and D to D students admitted in 2023-24 onwards

Department Elective–III (With Lab)

Sr. No.	Course Code	Course Name	L	T	P	C
1.	4EC601ME25	Analog CMOS Integrated Circuits	3	0	2	4
2.	4EC302ME25	Information and Coding Theory	3	0	2	4
3.	4EC401ME25	Data Compression Standards	3	0	2	4

Department Elective–IV (With Tutorial)

Sr. No.	Course Code	Course Name	L	T	P	C
1.	4EC501ME25	Machine Learning	3	1	0	4
2.	4EC502ME25	Modern Processor Architecture	3	1	0	4
3.	4EC303ME25	Broadband Wireless Communication	3	1	0	4

**NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
SCHOOL OF TECHNOLOGY
BTech in Electronics & Communication Engineering
Teaching & Examination Scheme**

Semester-VIII

w. e. f. Academic Year 2025-26

Course Code	Course Title	Teaching Scheme (Hours/week)				Examination Scheme			
		L	T	P	C	Duration Hours	Component Weightage		
						SEE	CE	LPW	SEE
4FT902CC25	Internship / Research Project	-	-	-	12	-	-	1	-
Total Credits = 12									

L: Lecture, P/T: Practical / Tutorial, C: Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

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