

B N M Institute of Technology

An Autonomous Institution under VTU Approved by AICTE

Department: Electronics and Communication Engineering

Scheme of Teaching and Examination-Autonomous Effective from Academic year 2025-26

I Semester M. Tech (VLSI Design and Embedded Systems)

Sl. No.	Course Type	Course Code	Course Title	Teaching Department	Teaching Hours/Week				Hours/Week	Examination			
					L	T	P	J		Credits	CIA Marks	SEA Marks	Total Marks
1	PCC	25VDE211	Custom IC Design	ECE	4	-	-	-	4	4	50	50	100
2	PCL	25VDE212	QNX-based Embedded RTOS Design	ECE	2	-	4	-	6	4	50	50	100
3	PCI	25VDE213	Modern CMOS Circuit Design	ECE	3	-	2	-	5	4	50	50	100
4	PBL	25VDE214	System Verilog for Design and Verification	ECE	2	-	2	2	6	4	50	50	100
5	PEC	25VDEP215X	25VDEP2151	ECE	3	-	0	-	3	3	50	50	100
	25VDEP2152		Hybrid AI models for Power-Efficient VLSI System										
	25VDEP2153		Memory design for Low Power VLSI System.										
	25VDEP2154		Power semiconductor devices and Technology										
	PEC		Computer Aided Design of VLSI Circuits										
6	PCC	25VDE216	Research Methodology & IPR	ECE	3	-	-	-	3	3	50	50	100
TOTAL					17	0	8	2	27	22	300	300	600

L-Theory lecture, **T**-Tutorial, **P**-Practical, **J**-Project, **NCMC**-Non-Credit Mandatory Course
CIA: Continuous Internal Assessment, **SEA**: Semester End Assessment

Note: PCC: Professional Core Course, HSS: Humanity and Social Science & Management Courses, PCI: Professional Core Integrated, PCL: Professional course with Lab
PBL: Project-Based Learning, AEC: Ability Enhancement Courses, PEC: Professional Elective, INT: Summer Internship, PRJ: Project Work

Credit definition: 1 hour Lecture (L) per week = 1 Credit
 2 hours Tutorial (T) per week = 1 Credit
 2 hours Practical/Drawing (P) per week = 1 Credit
 2 hours Project Component (J) per week = 1 Credit

(a) 4 Credit courses are to be designed for 50 hours of the Teaching-Learning process. (b) 3 Credit courses are to be designed for 40-hour teaching-learning process.
 (c) 2 Credit courses are to be designed for 25 hours Teaching-Learning process (d) 1 Credit course are to be designed for 12-15 hours Teaching-Learning process

Yashraj

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Principal

Additional Director & Principal
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