

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M. TECH. (VLSI SYSTEM DESIGN)
COURSE STRUCTURE AND SYALLABUS

I SEMESTER

Code	Group	Subject	L	P	Credits
		Microcontrollers for Embedded System Design	3	0	3
		CPLD & FPGA Architectures and Applications	3	0	3
		VLSI Technology & Design	3	0	3
		Algorithms for VLSI Design Automation	3	0	3
	Elective -I	Hardware Software Co-Design Digital System Design Device Modeling	3	0	3
	Elective -II	Advanced Digital Signal Processing Network Security & Cryptography Micro Electromechanical Systems	3	0	3
	Lab	Simulation Lab (VLSI)	0	3	2
		Seminar		-	2
		Total Credits (6 Theory + 1 Lab.)			22

II SEMESTER

Code	Group	Subject	L	P	Credits
		System On Chip Architecture	3	0	3
		CMOS Analog & Mixed Signal Design	3	0	3
		Embedded Real Time Operating Systems	3	0	3
		Design of Fault Tolerant Systems	3	0	3
	Elective - III	Digital Signal Processors and Architectures Image & Video Processing VLSI Signal Processing	3	0	3
	Elective - IV	System Modeling and Simulation Low Power VLSI Design Semiconductor Memory Design & Testing	3	0	3
	Lab	Embedded Systems Design Lab	0	3	2
		Seminar		-	2
		Total Credits (6 Theory + 1 Lab.)			22

II YEAR -I Semester

Code	Group	Subject	L	P	Credits
		Comprehensive Viva			2
		Project Seminar	0	3	2
		Project work			18
		Total Credits			22

II YEAR - II Semester

Code	Group	Subject	L	P	Credits
		Project work and Seminar		-	22
		Total Credits			22