

M. Tech 2015 Admission

Department: Electronics
Stream: VLSI and Embedded Systems

Semester -I

Course Code	Name of Course	C/E	L-T-P	Internal Marks	End semester exam		Credits
					Marks	Duration (Hrs)	
01 VE 601	Advanced Digital System Design	C	4-0-0	50	50	3	4
01 VE 603	VLSI Technology and Design	C	4-0-0	50	50	3	4
01 VE 605	Designing with Microcontrollers	C	4-0-0	50	50	3	4
01 VE 607	Embedded and Real Time Systems	C	3-0-0	50	50	3	3
	Elective-I	E	3-0-0	50	50	3	3
01 VE 615	Research methodology	C	0-1-2	100	0	0	2
01 VE 617	Seminar	C	0-0-2	100	0	0	2
01 VE 619	Reconfigurable Computing Lab	C	0-0-2	100	0	0	1

Total credits: 23

Semester -II

Course Code	Name of Course	C/E	L-T-P	Internal Marks	End semester exam		Credits
					Marks	Duration (Hrs)	
01 VE 602	Analog Integrated Circuit Design	C	4-0-0	50	50	3	4
01 VE 604	Advanced VLSI DSP Architectures	C	3-0-0	50	50	3	3
01 VE 606	Embedded System Design	C	3-0-0	50	50	3	3
	Elective -II	E	3-0-0	50	50	3	3
	Elective -III	E	3-0-0	50	50	3	3
01 VE 620	Mini Project	C	0-0-4	100	0	0	2
01 VE 622	Advanced Micro Controller Lab	C	0-0-2	100	0	0	1

Total credits: 19

Semester -III

Course Code	Name of Course	C/E	L-T-P	Internal Marks	End semester exam		Credits
					Marks	Duration (Hrs)	
	Elective- IV	E	3-0-0	50	50	3	3
	Elective- V	E	3-0-0	50	50	3	3
01 VE 713	Seminar	C	0-0-2	100	0	0	2
01 VE 715	Project - Phase 1	C	0-0-8	50	0	0	6

Total credits: 14

Semester -IV

Course Code	Name of Course	C/E	L-T-P	Internal Marks	End semester exam		Credits
					Marks	Duration (Hrs)	
01 VE 702	Project - Phase 2	C	0-0-21	100	0	0	12

Total credits for the course: 68

List of Electives

Semester	Electives	Course Code	Name of Course
I	Elective-I	01 VE 609	VLSI Design Automation
		01 VE 611	Electronic Design Automation Tools
		01 VE 613	Electronic System Design
II	Elective -II	01 VE 608	System on Chip Design
		01 VE 610	Fundamentals of Mechatronics
		01 VE 612	Embedded Linux Systems
	Elective -III	01 VE 614	Functional Verification with SystemVerilog
		01 VE 616	High Speed Digital Design
		01 VE 618	Nanoelectronics: Devices & Materials
III	Elective- IV	01 VE 701	Low Power Digital Design
		01 VE 703	VLSI Testing
		01 VE 705	Innovative DSP Concepts
	Elective- V	01 VE 707	Static Timing Analysis: Constraints & Analysis
		01 VE 709	Nanoscale Transistors
		01 VE 711	Speech Signal Processing