

M.Tech (VLSI), B.Tech+M.Tech(5/6 and 6/6), Two Year (Four Semesters)
Scheme to be valid with effect from the admitted batch of 2019 – 2020

I-Semester

Code	Name of the Subject	Periods/Week		Max. Marks		Total	Credits
		Theory	Lab	Ext.	Int.		
MTVL1.1	VLSI Design Techniques	3	-	70	30	100	3
MTVL1.2	Analog IC design	3	-	70	30	100	3
MTVL1.3	Elective – I (Digital Signal Processing/ Application Specific Integrated Circuit(ASIC)/ Advanced Microprocessors & Microcontrollers)	3	-	70	30	100	3
MTVL1.4	Elective – II (CPLD and FPGA Architecture & Applications / VHDL Modelling of Digital Systems/EDA Tools)	3	-	70	30	100	3
MTVL1.5	Research Methodology & IPR	3	-	70	30	100	2
MTVL1.6	Audit Course	3	-	70	30	100	0
MTVL1.7	HDL Programming LAB-I	-	3	-	100	100	2
MTVL1.8	Analog IC Design LAB	-	3	-	100	100	2
		18	6	420	380	800	18

II-Semester

Code	Name of the Subject	Periods/Week		Max. Marks		Total	Credits
		Theory	Lab	Ext.	Int.		
MTVL2.1	Digital System Design	3	-	70	30	100	3
MTVL2.2	Algorithms for VLSI design automation	3	-	70	30	100	3
MTVL2.3	Elective – III (Low Power VLSI Design/ Wireless Communication and networks/ RF & Microwave Integrate Circuits)	3	-	70	30	100	3
MTVL2.4	Elective – IV (Microcontroller and Embedded Systems/ Digital Systems Testing & Testable Design/ DSP Processors and Architectures)	3	-	70	30	100	3
MTVL2.5	Audit Course	3	-	70	30	100	2
MTVL2.6	HDL Programming LAB-II	-	3	-	100	100	2
MTVL2.7	Mixed Signal Simulation LAB	-	3	-	100	100	2
MTVL2.8	Mini Project with Seminar	-	3	-	100	100	2
		15	9	350	450	800	18

III-Semester

Code	Name of the Subject	Periods/Week		Max. Marks		Total	Credits
		Theory	Lab	Ext.	Int.		
MTVL3.1	Elective – V System Modeling and Simulation/ / EMI/EMC/ Hardware Software Co Design	3	-	70	30	100	3
MTVL3.2	Open Elective Cellular & Mobile Communications/Business Analytics Industrial Safety Operational Research Cost Management of Engineering Projects	3	-	70	30	100	3
MTVL3.3	Dissertation- I / Industrial Project	-	-	-	100	100	10
		6	-	140	160	300	16

IV-Semester

Code	Name of the Subject	Periods/Week		Max. Marks		Total	Credits
		Theory	Lab	Ext.	Int.		
MTVL4.1	Dissertation-II	-	-	70	30	100	16
		-	-	70	30	100	16

Note:

1. At the end of 3rd semester project review is conducted by HOD with the committee consisting of the HOD, Chair Person of BOS and the Guide. In the Affiliated Colleges, Project (Preliminary) will be evaluated by concerned HOD and the thesis Guide of their respective colleges.
2. At the end of the 4th semester there will be a final viva voce for the project work conducted by the HOD with the committee consisting of HOD, Chair Person of BOS, the Guide and an External examiner nominated by the university.

Audit Course 1 & 2

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga

8. Personality Development through Life Enlightenment Skills.