

M.Tech. (VLSI Technology)

Course Schedule:

Semester I:

Course No.	Title	Type	L- T- P	Credits
MTVT-101	MOS Circuit Design	PC	3- 3- 0	6
MTVT-102	Digital Systems Design	PC	3- 3- 0	6
MTVT-103	VLSI Fabrication Technology	PC	3- 3- 0	6
MTVT-104	Digital Signal Processing and Applications	PC	3- 3- 0	6
MTVT-105	Lab-I (HDL tools))	PC	0- 0- 6	6
MTVT-106	Lab-II (VLSI process technology)	OE	0- 0- 4	4
			Total Credits	34

Semester II:

Course No.	Title	Type	L- T- P	Credits
MTVT-201	Analog VLSI Circuits	PC	3- 3- 0	6
MTVT-202	CMOS RF Circuit Design	PC	3- 3- 0	6
MTVT-203	Designing with ASICs	PC	3- 3- 0	6
MTVT-204	Lab-III (Physical Design Lab)	PC	0- 0- 6	6
MTVT-205	Lab-IV (Semiconductor Processing Lab)	PC	0- 0- 6	6
MTVT-206	Major Project Part -I	OE	0- 0- 6	6
			Total Credits	36

Semester III:

Course No.	Title	Type	L- T- P	Credits
MTVT-301	Elective-I	OE	3- 3- 0	6
MTVT-302	Major Project Part II	OE		
	First Stage Evaluation		0- 0- 4	4
	Second Stage Evaluation		0- 0- 4	4
			Total Credits	14

Semester IV:

Course No.	Title	Type	L- T- P	Credits
MTVT-401	Major Project Part II (Thesis)	OE	0-0-10	10
	Third Stage Evaluation	OE	0- 0- 6	6
			Total Credits	16

(Distribution of Total Credits)**Grading Scheme**

Program Core Theory (PCT)	Program Core Lab (PCL)	Program Elective(PE)	Open Elective(OE)	Total Credits
36	18	06	40	100

Grades	Credits	CGPA (10 points)
AA	91-100	10
AB	81-90	09
BB	71-80	08
BC	61-70	07
CC	51-60	06
CD	41-50	05
DD	40	04

Open Electives (for MTVT-301)

- 1) Advanced Computer Architectures (OE1)
- 2) Embedded Systems (OE2)
- 3) Analog Signal Processing (OE3)
- 4) Modeling of Analog and Digital Systems (OE4)
- 5) Optical Integrated Circuits (OE5)
- 6) Neural networks and Artificial Intelligence (OE6)
- 7) Bluetooth Technology (OE7)
- 8) MEMS and IC Integration (OE8)
- 9) Compound Semiconductor Material and Devices (OE9)