

Department of Computer Science and Engineering

M.TECH IN COMPUTER SCIENCE & ENGG.

FIRST SEMESTER

SI No.	Course Code	Course Title	Scheme of Studies Per Week			Credit
THEORY COURSES						
			L	T	P	
1	MCST 101	Program Core I- Mathematical foundations of Computer Science	3	0	0	3
2	MCST 102	Program Core II – Advanced Data Structure	3	0	0	3
3	MCST 11X	Program Elective I	3	0	0	3
4	MCST 12X	Program Elective II	3	0	0	3
5	MOET 191	Research Methodology and IPR	2	0	0	2
6	MAUT 19X	Audit Course	2	0	0	0
7	MCSP 102	Advance Data Structure Lab	0	0	4	2
8	MCSP 1XX	Lab 2 Based on Elective	0	0	4	2
Total Credit						18

SECOND SEMESTER

9	MCST 201	Program Core III – Advance Algorithms	3	0	0	3
10	MCST 202	Program Core IV – Soft Computing	3	0	0	3
11	MCST 23X	Program Elective III	3	0	0	3
12	MCST 24X	Program Elective IV	3	0	0	3
13	MAUT 29X	Audit Course	2	0	0	0
14	MCSP 20X	Lab 3 Based on Cores	0	0	4	2
15	MCSP 2XX	Lab 4 Based on Electives	0	0	4	2
16	MCSP 202	Mini Project with Seminar	2	0	0	2
Total Credit						18

*Students be encouraged to go to Industrial Training/Internship for at least 2-3 months during semester break

THIRD SEMESTER

17	MCST 35X	Program Elective 5	3	0	0	3
18	MOET 39X	Open Elective	3	0	0	3
19	MCSP	Dissertation – I / Industrial Project	0	0	20	10
Total Credits						16

*Students going for Industrial Project/ Thesis will complete these courses through MOOCs.

FOURTH SEMESTER

20	MCSP 401	Dissertation II	0	0	32	16
Total Credits						16

The program offers several elective courses, focusing on different aspects of Computer Science and Engineering. A student can choose to do any course from given program elective set.

Program Elective I

SNo	Course No	Subject Name
1	MCST 111	Machine Learning
2	MCST 112	Wireless Sensor Networks
3	MCST 113	Introduction of Intelligent System

Program Elective II

SNo	Course No	Subject Name
1	MCST 121	Data Science
2	MCST 122	Distributed Systems
3	MCST 123	Advanced Wireless and Mobile Networks

Audit Course 1

SNo	Course No	Subject Name
1	MAUT 191	English for Research Paper Writing
2	MAUT 192	Disaster Management
3	MAUT 193	Sanskrit for Technical Knowledge
4	MAUT 194	Value Education

Program Elective III

SNo	Course No	Subject Name
1	MCST 231	Data Preparation and Analysis
2	MCST 232	Secure Software Design and Enterprise Computing
3	MCST 233	Computer Vision

Program Elective IV

SNo	Course No	Subject Name
1	MCST 241	Human and Computer Interaction
2	MCST 242	GPU Computing
3	MCST 243	Digital Forensics

Audit Course 2

SNo	Course No	Subject Name
1	MAUT 291	Constitution of India
2	MAUT 292	Pedagogy Studies
3	MAUT 293	Stress Management by Yoga
4	MAUT 294	Personality Development through Life Enlightenment Skills

Program Elective V

SNo	Course No	Subject Name
1	MCST 351	Mobile Applications and Services
2	MCST 352	Compiler for HPC
3	MCST 353	Optimization Techniques

Open Elective

SNo	Course No	Subject Name
1	MOET 391	Business Analytics
2	MOET 392	Industrial Safety
3	MOET 393	Operations Research
4	MOET 394	Cost Management of Engineering Projects
5	MOET 395	Composite Materials
6	MOET 396	Waste to Energy