Date: 20 April 2023

Curricula of M.Tech (CSE) Programme – 2 YEAR PROGRAM

With specialisation Artificial Intelligence and Machine Learning (AI&ML), Data Analytics (DA), Cyber Security (CYS), Internet of Things (IoT), Information Technology and Entrepreneurship (ITE)

Admitted 2023 Onwards

FIRST SEMESTER

SNo	Course No.	Course Title	L	T	P	Total	Credits
1.	17M11CS111	Data Structures and Algorithms for Big Data	3	-	-	03	3
2.	17M11CS112	Machine Learning and Data Mining	3	-	-	03	3
3.		Elective – I	3	-	-	03	3
4.		Elective – II	3	-	-	03	3
5.	18M11GE111	Research Methodology and Intellectual Property Rights	2	-	-	02	2
6.	17M15CS111	Advanced Algorithms Lab	-	-	2	02	1
7.	17M15CS112	Machine Learning and Data Mining Lab			2	02	1
8.	17M15CS113	Cloud Technology Lab			2	02	1
		TOTAL	14	-	6	20	17

SECOND SEMESTER

SNo	Course No.	Course Title	L	T	P	Total	Credits
1.	17M11CS121	Cloud and Web Services Software Engineering	3	-	-	03	3
2.	17M11CS122	Performance Evaluation of Computing Systems	3	-	-	03	3
3.		Elective – III	3	-	-	03	3
4.		Elective – IV	3	-	-	03	3
5		Elective – V	3	-	-	03	3
6.		Audit-I (To be offered by HSS Dept)	2	-	-	02	Qualifying
7.	17M17CS111	Project Based Learning-I (Open Source Software Development)		-	4	04	2
8.	17M15CS121	Cloud and Web Services Lab	-	-	2	02	1
9.	17M15CS122	Performance Engineering Lab			2	02	1
10.	17M15CS123	IOT Systems Development Lab			2	02	1
		TOTAL	17	-	10	27	20

***Elective III, IV, V will be based on M. Tech. Specialization

THIRD SEMESTER

SNo	No.	Title	L	T	P	Total	Credits
		Course			**Contact Hours**		**Credits**
1.		Open Elective	3			3	3
2.	17M17CS212	Seminar & Term Paper OR Earn credits by transfer, e.g., MOOCs, Course Work at another Institute, Supervised Study				4	4
3.	17M17CS121	Project Based Learning-II (Software Development Automation)				8	4
4.	17M17CS213/ 17M17CS214/ 17M17CS215	Dissertation /Industrial Project/Entrepreneurial Project				8	4
5.		Audit-II (To be offered by HSS Dept)	2			2	Qualifying
		TOTAL				25	15

FOURTH SEMESTER

SNo	No.	Title	L	T	P	Total	Credits
		Course			**Contact Hours**		**Credits**
1.	17M17CS223/ 17M17CS224/ 17M17CS225	Dissertation /Industrial Project/ Entrepreneurial Project				32	16
		TOTAL				32	16

TOTAL CREDITS: 68

Tentative list of MTech (CSE) Electives (To be updated time to time)

Elective I

1. Advanced programming with python and R
2. Object oriented programming using JAVA

Elective II

1. Software Quality and Testing
2. Computer Vision

Elective III

	AI & ML	DA	Cybersecurity	IoT	ITE
Elective III	Deep Learning	Deep Learning	Cryptography and Cybersecurity	Deep Learning	TBD
	Text Analytics	Text Analytics	Security of e-Systems and Networks	IoT Analytics	
Elective IV	Essential Statistics for Data Science	Essential Statistics for Data Science	Blockchain	IoT Architecture and Protocols	TBD
	Meta Heuristics Modelling	Social Network Analytics	Ethical Hacking	Fog Computing	
Elective V	Random Processes and Optimization Techniques /	Digital Forensics and Fraud Analytics	Digital Forensics and Fraud Analytics	Advanced computer networks	TBD
	Web Intelligence	Audio and video analytics	Wireless Sensors Networks	Wireless Sensors Networks	