13. Courses of Study and Scheme of Assessment

MTech Information Technology **(2021 REGULATIONS)**

(Minimum No. of credits to be earned: 71*)

Course Code	Course Title	Hours / Week			Credits	Maximum Marks			CAT
		Lecture	Tutorial	Practical		CA	FE	Total	
I SEMESTER									
21NN01	Linear Algebra and Optimization	3	1	0	4	50	50	100	PC
21NN02	Advanced Data Structures and Algorithm Analysis	2	2	0	4	50	50	100	PC
21NN03	Applied Machine Learning	3	0	0	3	50	50	100	PC
21NN04	Wireless Communication and Networks	3	0	0	3	50	50	100	PC
21NN05	Advanced Operating Systems	2	2	0	4	50	50	100	PC
21NN06	Research Methodology and IPR	2	0	0	2	50	50	100	RMC
21NN72	Audit Course – I	2	0	0	Grade	100	0	100	MC
21NN51	Applied Machine Learning Laboratory	0	0	4	2	50	50	100	PC
21NN52	Networks Laboratory	0	0	4	2	50	50	100	PC
Total 30hrs		**17**	**5**	**8**	**24**	**500**	**400**	**900**	
II SEMESTER									
21NN07	Data Analytics	2	2	0	4	50	50	100	PC
21NN08	Edge Cloud Computing	3	1	0	4	50	50	100	PC
21NN__	Professional Elective – I	3	0	0	3	50	50	100	PE
21NN__	Professional Elective – II	3	0	0	3	50	50	100	PE
21NN__	Professional Elective – III	3	0	0	3	50	50	100	PE
21NN82	Audit Course – II	2	0	0	Grade	100	0	100	MC
21NN61	Application Development Laboratory	0	0	4	2	50	50	100	PC
21NN62	Edge Cloud Computing Laboratory	0	0	4	2	50	50	100	PC
21NN63	Industrial visit and Technical Seminar	0	0	4	2	50	50	100	EEC
Total 31 hrs		**16**	**3**	**12**	**23**	**500**	**400**	**900**	
III SEMESTER									
21NN__	Professional Elective – IV	3	0	0	3	50	50	100	PE
21_____	Open Elective	3	0	0	3	50	50	100	OE
21NN71	Project Work - I	0	0	12	6	50	50	100	EEC
Total 18hrs		**6**	**0**	**12**	**12**	**150**	**150**	**300**	
IV SEMESTER									
21NN81	Project Work - II	0	0	24	12	50	50	100	EEC
Total 24hrs		**0**	**0**	**24**	**12**	**50**	**50**	**100**	
PROFESSIONAL ELECTIVE THEORY COURSES (Four to be opted)									
21NN21	Agent Based Intelligent Systems	3	0	0	3	50	50	100	PE
21NN22	Bio-Inspired Computation Techniques	3	0	0	3	50	50	100	PE
21NN23	Neural Networks and Deep Learning	3	0	0	3	50	50	100	PE
21NN24	Probabilistic Networks and Expert Systems	3	0	0	3	50	50	100	PE

21NN25	Multicore Architecture	3	0	0	3	50	50	100	PE
21NN26	Natural Language Processing	3	0	0	3	50	50	100	PE
21NN27	Network Algorithms	3	0	0	3	50	50	100	PE
21NN28	Service Oriented Architecture	3	0	0	3	50	50	100	PE
21NN29	Software Defined Networks	3	0	0	3	50	50	100	PE
21NN30	Agile Methodology	3	0	0	3	50	50	100	PE
21NN31	Game Programming	3	0	0	3	50	50	100	PE
21NN32	5G Communication Networks	3	0	0	3	50	50	100	PE
21NN33	Parallel and Distributed Algorithms	3	0	0	3	50	50	100	PE
21NN34	Advanced Databases	3	0	0	3	50	50	100	PE
21NN35	Attacks and Defense	3	0	0	3	50	50	100	PE
21NN36	Digital Image and Video Processing	3	0	0	3	50	50	100	PE
21NN37	Quantum Computing	3	0	0	3	50	50	100	PE
21NN38	Information System Security Management	3	0	0	3	50	50	100	PE
21NN39	Mixed Reality	3	0	0	3	50	50	100	PE
21NN40	Data Mining And Applications	3	0	0	3	50	50	100	PE
21NN41	Data Analysis for Image and Video Processing	3	0	0	3	50	50	100	PE
OPEN ELECTIVE THEORY COURSE									
21NN91	Computational Finance	3	0	0	3	50	50	100	OE

***** Indicated is the minimum number of credits to be earned by a student.

CAT – Category; PC – Professional Core; PE - Professional Elective; RMC - Research Methodology and IPR; EEC – Employability Enhancement Course; MC - Mandatory Course; Grade – Completed / Not Completed; OE – Open Elective.