Jaypee University of IT Waknaghat

Curricula for 2 year MTech Computer Science Engineering
Batch 2018-20 onwards Mtech CSE: I Semester (M1)

SN	Sub Code	Subject	C/E	Contact hours				Cr
				L	T	P	Hr	
1	10M11CI111	Advanced Data Structures	C	3	0	0	3	3
2	10M11CI112	Advanced Computer Networks	C	3	0	0	3	3
3	10M11CI113	Advanced Database Systems	C	3	0	0	3	3
4	10M11CI114	High performance Computer Architecture	C	3	0	0	3	3
5	CS	DE-I	E	3	0	0	3	3
6	CS	DE-II	E	3	0	0	3	3
7	CS	DE-III	E	3	0	0	3	3
8	10M17CI171	Software Systems Lab - I	C	0	0	4	4	2
		TOTAL CREDITS					25	23

Curricula for 2 year MTech Computer Science Engineering
Batch 2017-19 onwards Mtech CSE: II Semester (M2)

SN	Sub Code	Subject	C/E	Contact hours				Cr
				L	T	P	Hr	
1	10M11CI211	Advanced Algorithms	C	3	0	0	3	3
2	10M11CI212	Advanced Operating Systems	C	3	0	0	3	3
3	10M11CI213	Advanced Software Engineering	C	3	0	0	3	3
4	10M11CI214	Multimedia Systems	C	3	0	0	3	3
5	CS	DE-IV	E	3	0	0	3	3
6	CS	DE-V	E	3	0	0	3	3
7	CS	DE-VI	E	3	0	0	3	3
8	10M17CI271	Software Systems Lab - II	C	4	0	2	6	2
		TOTAL CREDITS					27	23

Curricula for 2 year MTech Computer Science Engineering
Batch 2017-19 onwards Mtech CSE: III Semester (M3)

SN	Sub Code	Subject	C/E	Contact hours				Cr
				L	T	P	Hr	
1	10M19CI393	Seminar	C	0	0	4	4	2
2	10M19CI391	Project, Part -I	C	0	0	24	24	12
		TOTAL CREDITS					28	14

		Curricula for 2 year MTech Computer Science Engineering							
		Batch 2017-19 onwards Mtech CSE: IV Semester (M4)							
SN	Sub Code	Subject	C/E	Contact hours				Cr	
				L	T	P	Hr		
1	10M19CI493	Project Seminar	C	0	0	4	4	2	
2	10M19CI491	Project, Part -II	C	0	0	28	28	14	
		TOTAL CREDITS					32	16	
		List of Electives for DE-I, DE-II, DE-III, DE-IV,DE-V and,DE-VI							
		To be updated from time to time							
1	10M1WCI131	System and Network Security Techniques							
2	14M1WCI333	Natural Language Processing							
3	14M1WCI431	Parallel Programming Techniques							
4	11M1WCI432	Performance Evaluation of Networks							
5	13M1WCI331	Machine Learning							
6	15M1WCI331	Advanced Theory of Computation							
7	11M1WCI431	Advanced Web Mining							
8	15M1WCI431	Advanced AI							
9	15M1WCI432	Advanced Computational Techniques in Engineering							
10	CS	Algorithmic Graph Theory							
11	CS	Analysis of Algorithms							
12	CS	Cognitive Sciences							
13	CS	Computation Theory and Applications							
14	CS	Computer Vision							
15	CS	Control Systems Security							
16	18M1WCI113	Cyber Warfare & Cyber Crime							
17	CS	Embedded System Design							
18	CS	Fault Tolerant Computing							
19	CS	Grid Computing							
20	CS	Incident Response & Event Management							
21	CS	Information and Network Security							
22	CS	Intelligent Systems							
23	CS	Knowledge Discovery							
24	CS	Machine Learning							
25	CS	Mobile Computing							
26	CS	Parallel Computing							
27	CS	Pattern Recognition							
28	CS	Penetration Testing							
29	CS	Performance Evaluation of Computer Networks							
30	CS	Quantum Algorithms							

31	CS	Real Time Operating Systems
32	CS	Theory of Programming Languages
33	CS	Threat & Vulnerability Analysis
34	CS	VLSI Algorithms
35	CS	Advanced Wireless and Mobile Communications
36	CS	Digital CMOS design
37	CS	Digital Signal Processors and Applications
38	CS	Information and Coding Theory
39	CS	VLSI Circuit and System Design
40	CS	VLSI Modelling and Simulation
41	CS	VLSI Testing
42	18M1WCI332	Deep Learning

Summary	Cr
Sem1	23
Sem2	23
Sem3	14
Sem4	16
Total	76

76 credits curricula M Tech CSE