UNIVERSITY SCHOOL
OF
INFORMATION AND COMMUNICATION TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PROGRAMME STRUCTURE

M.TECH. COMPUTER SCIENCE AND ENGINEERING

SPECILIZATION : ARTIFICIAL INTELLIGENCE AND ROBOTICS

2020-2022

GAUTAM BUDDHA UNIVERSITY
GAUTAM BUDH NAGAR, GREATER NOIDA, UP, INDIA

SEMESTER I

S.No.	Course Code	Course Name	L	T	P	Credits	Types
1	CS521	Advanced Data Base Management System	3	0	0	3	CC1
2	CS523	Advanced Computer Architecture	3	0	0	3	CC2
3	CS525	Intelligent System Design	3	0	0	3	CC3
4	CS527	Research Techniques in ICT	3	1	0	4	CC4 / SEC
5		Open Elective 1	3	0	0	3	OE1 / AECC
6	CS581	Advanced Data Base Management System Lab	0	0	3	2	CC-L1 /SEC
7	CS583	Intelligent System Design Lab	0	0	3	2	CC-L2
8	GP	General Proficiency		Non Credit			
		Total Hours and Credits	**15**	**1**	**6**	**20**	

SEMESTER II

S.No.	Course Code	Course Name	L	T	P	Credits	Types
1	CS542	Knowledge Engineering	3	0	0	3	CC5
2	CS544	Soft Computing Techniques	3	0	0	3	CC6 / SEC
3	CS546	Introduction to Embedded System	3	0	0	3	CC6
4		Elective 1	3	1	0	4	E1 / DSE
5		Generic Elective 1	3	0	0	3	GE1
6	CS584	Soft Computing lab	0	0	3	2	CC-L3 / SEC
7	CS592	Major Project	0	0	12	6	MP / E
8	GP	General Proficiency		Non Credit			
		Total Hours and Credits	**15**	**1**	**15**	**24**	

Summer Project in Industry will be done individually after Fourth Year of Integrated Dual Degree B.Tech. + M.Tech. CSE and Second Year of M.Tech. during the summer break and it will be of minimum 4 weeks. It will be evaluated as per University Examination Rules in III semester of M.Tech. and IX semester for Integrated Dual Degree B.Tech. + M.Tech. CSE .

SEMESTER III

S.No.	Course Code	Course Name	L	T	P	Credits	Types
1	CS641	Expert System Design	3	0	0	3	CC7
2	CS643	Robotics	3	0	0	3	CC8
3		Elective 2	3	0	0	3	E3 / DSE
4		Elective 3	3	0	0	3	E4 / DSE
5	ES401	Fundamental of Environmental Science	3	0	0	3	OE2 / AECC
6	CS683	Robotics Lab	0	0	3	2	CC-L4 / SEC
7	CS685	Summer Project	0	0	6	3	SP / E
8	CS691	Dissertation Part - I	0	0	16	8	DP1 / E
9	GP	General Proficiency	Non Credit				
		Total Hours and Credits	**15**	**0**	**25**	**28**	

SEMESTER IV

S.No.	Course Code	Course Name	L	T	P	Credits	Types
1	CS692	Dissertation Part - II	0	0	52	26	DP2 / E
2	GP	General Proficiency	Non Credit				
		Total Hours and Credits	**0**	**0**	**52**	**26**	

GRAND TOTAL OF CREDITS = **98**

Major Project will be in a group and It will be evaluated as per University Examination Rules.

Dissertation will be done individually and It will be evaluated as per University Examination Rules.

Summer Project will be done individually and It will be evaluated as per University Examination Rules.

USICT will provide a mentor/supervisor for major projects, summer project, and dissertation.

ELECTIVES FROM DCSE

S.No.	Course Code	Course Name	L	T	P	Credits	Types
1	CS548	Machine Translation and Learning	3	0	0	3	E1
2	CS550	Speech Processing and Systems	3	0	0	3	E1
3	CS552	Natural Language Processing	3	0	0	3	E1
4	CS554	AI Enabled Cyber Security	3	0	0	3	E1
5	CS645	Pattern Matching	3	0	0	3	E2
6	CS647	Evolutionary Computation	3	0	0	3	E2
7	CS649	Fuzzy Set Theory	3	0	0	3	E2
8	CS651	Adavanced Computer Vision	3	0	0	3	E2
9	CS653	Intelligent Information Retrieval	3	0	0	3	E3
10	CS655	Predictive Analysis	3	0	0	3	E3
11	CS657	R Programming	3	0	0	3	E3
12	CS659	Robot Kinematics	3	0	0	3	E3

OPEN AND GENERIC ELECTIVES FROM OTHER SCHOOLS

S.No.	Course Code	Course Name	L	T	P	Credits	Types
13	MA402	Modeling and Simulation	3	1	0	4	GE1
14	MA416	Probability and Stochastic Process	3	1	0	4	GE1
15	HU501	Advanced Course in Professional Communication	3	0	0	3	OE1
16	CH503	Patent Laws and IPR Issues	3	0	0	3	OE1
17	ES401	Fundamental of Environmental Science	3	0	0	3	OE2

CS	Computer Science		**FC**	Foundation Course
CC	Core Course from USICT		**SEC**	Skill Enhancement Course
CC-L	Core Course Lab from USICT		**E**	Elective
GE	General Elective from related discipline of other Deptt./School		**DP1**	Dissertation Part 1
AECC	Ability Enhancement Compulsary Course		**DP2**	Dissertation Part 2
OE	Open Elective from other discipline of other Deptt./School		**SP**	Summer Project
DSE	Discipline Specific Course		**MP**	Major Project