

MASTER OF TECHNOLOGY

(COMPUTER SCIENCE)

M.TECH. (CS)

(W. E. F. 2020-21)

Revised course codes (approved in 15th BOS)

Based on

AICTE Model Curriculum

for Postgraduate Degree Courses



DEPARTMENT OF COMPUTER SCIENCE & I.T.
MAULANA AZAD NATIONAL URDU UNIVERSITY
2020

Program Summary

Course Type	Abbreviation	Credits
Program Core	PC	16
Program Elective	PE	20
Research Methodology & IPR	RMIPR	2
Generic Elective	GE	8
Laboratory	LAB	8
Mini Project with Seminar	MPS	2
Dissertation	DISS	24
Total Credits:		80

Semester – I

Course Code	Course Title	Course Type	Marks			L-T-P	Credits
			Internal Assessment	Semester Exam	Total		
MTCS111PCT	Advanced Algorithm	PC	30	70	100	4-0-0	4
MTCS112PCT	Advanced Computer Architecture	PC	30	70	100	4-0-0	4
MTCS111RMT	Research Methodology & IPR	RMIPR	15	35	50	2-0-0	2
MTCS11XPET	Program Elective-1	PE	30	70	100	4-0-0	4
MTCS12XPET	Program Elective-2	PE	30	70	100	4-0-0	4
PGCS13XGET	Generic Elective-1	AC	30	70	100	4-0-0	4
MTCS160PCP	Lab– I Advanced Algorithm Lab	LAB	50	50	100	0-0-4	2
MTCS16XPEP	Lab – II (Based on Elective-I)	LAB	50	50	100	0-0-4	2
Total					800	22-0-8	26

Semester – II

Course Code	Course Title	Course Type	Marks			L-T-P	Credits
			Internal Assessment	Semester Exam	Total		
MTCS211PCT	Machine Learning	PC	30	70	100	4-0-0	4
MTCS212PCT	Internet of Things	PC	30	70	100	4-0-0	4
MTCS23XPET	Program Elective-3	PE	30	70	100	4-0-0	4
MTCS24XPET	Program Elective -4	PE	30	70	100	4-0-0	4
PGCS23XGET	Generic Elective-2	AC	30	70	100	4-0-0	4
MTCS260PCP	Lab – III-ML Lab	LAB	50	50	100	0-0-4	2
MTCS261PCP	Lab – IV -IoT Lab	LAB	50	50	100	0-0-4	2
MTCS270PCP	Mini Project with Seminar*	MPS	50	50	100	0-0-4	2
Total					800	20-0-12	26

*Students are encouraged to go to Industrial Training/Internship for at least 2-3 months during semester break. They need to make a prototype model in the allotted areas on the recommendations of the supervisor.

Semester – III

Course Code	Course Title	Course Type	Marks			L-T-P	Credits
			Internal Assessment	Semester Exam	Total		
MTCS31XPET	Program Elective -5	PE	30	70	100	4-0-0	4
MTCS370PCP	Dissertation-I	DISS	210	490	700	0-0-20	10
Total					800	4-0-20	14

Semester – IV

Course Code	Course Title	Course Type	Marks			L-T-P	Credits
			Internal Assessment	Semester Exam	Total		
MTCS470PCP	Dissertation-II	DISS	240	560	800	0-0-28	14
Total					800	0-0-28	80

L-T-P stands for number of contact hours as Lecture-Tutorial-Practical in a week.

PROGRAM ELECTIVES (PE) & GENERIC ELECTIVES (GE)

Semester – 1st			
Course Code	Course Title	Course Code	Course Title
Program Elective – I with Lab		Program Elective – II	
MTCS111PET	Advanced Network Security	MTCS121PET	Intelligent Systems
MTCS112PET	Distributed Database	MTCS122PET	Augmented & Virtual Reality
MTCS113PET	Data Science	MTCS123PET	Soft Computing
MTCS114PET	Semantics Web	MTCS124PET	Digital Forensics
Program Elective – I Lab			
MTCS160PEP	Advanced Network Security Lab		
MTCS161PEP	Distributed Database Lab		
MTCS162PEP	Data Science Lab		
MTCS163PEP	Semantics Web Lab		
Generic Elective-1			
PGCS131GET	English for Research Paper Writing		
PGCS132GET	Disaster Management		
PGCS133GET	Sanskrit for Technical Knowledge		
PGCS134GET	Value Education		
Semester – 2nd			
Program Elective – III		Program Elective – IV	
MTCS231PET	Blockchain Technology	MTCS241PET	Advanced Operating System
MTCS232PET	Compilers for High Performance Computing	MTCS242PET	Digital Image Processing
MTCS233PET	Distributed Computing	MTCS243PET	Advanced Wireless & Mobile Networks
MTCS234PET	Natural Language Processing	MTCS244PET	Mobile Applications & Services
MTCS235PET	Quantum Computing	MTCS245PET	Graphics Processing Unit Computing
Generic Elective-2			
PGCS231GET	Constitution of India		
PGCS232GET	Pedagogy Studies		
PGCS233GET	Stress Management by Yoga		
PGCS234GET	Personality Development through Life Enlightenment Skills		

Semester-3rd

Program Elective – V

MTCS311PET	Deep Learning
MTCS312PET	Secure Software Design & Enterprise Computing
MTCS313PET	Wireless Access Technologies
MTCS314PET	Data Preparation & Analysis
MTCS315PET	Optimization Techniques