Master of Technology
(Computer Science &Engineering)

Programme Code: MTC

Duration – 2 Years Full Time

Programme Structure
And
Curriculum & Scheme of Examination

2020-2022

AMITY UNIVERSITY
R A J A S T H A N

PREAMBLE

Amity University aims to achieve academic excellence by providing multi-faceted education to students and encourage them to reach the pinnacle of success. The University has designed a system that would provide rigorous academic programme with necessary skills to enable them to excel in their careers.

This booklet contains the Programme Structure, the Detailed Curriculum and the Scheme of Examination. The Programme Structure includes the courses (Core and Elective), arranged semester wise. The importance of each course is defined in terms of credits attached to it. The credit units attached to each course has been further defined in terms of contact hours i.e. Lecture Hours (L), Tutorial Hours (T), Practical Hours (P). Towards earning credits in terms of contact hours, 1 Lecture and 1 Tutorial per week are rated as 1 credit each and 2 Practical hours per week are rated as 1 credit. Thus, for example, an L-T-P structure of 3-0-0 will have 3 credits, 3-1-0 will have 4 credits, and 3-1-2 will have 5 credits.

The Curriculum and Scheme of Examination of each course includes the course objectives, course contents, scheme of examination and the list of text and references. The scheme of examination defines the various components of evaluation and the weightage attached to each component. The different codes used for the components of evaluation and the weightage attached to them are:

Components	Codes	Weightage (%)
Case Discussion/ Presentation/ Analysis	C	05 - 10
Home Assignment	H	05 - 10
Project	P	05 - 10
Seminar	S	05 - 10
Viva	V	05 - 10
Quiz	Q	05 - 10
Class Test	CT	10 - 15
Attendance	A	05
End Semester Examination	EE	70

It is hoped that it will help the students study in a planned and a structured manner and promote effective learning. Wishing you an intellectually stimulating stay at Amity University.

PROGRAMME STRUCTURE

FIRST SEMESTER

Subject Code	Course	Category	L	T	P/FW	Credit Units
MTC101	Data Structure & Algorithm Design	CC	2	1		3
MTC102	Object Oriented Software Engineering	CC	2	1		3
MTC103	Operating System and Unix	CC	2	1		3
MTC123	Operating System and Unix Lab	CC			2	1
MTC160	Seminar I (Critical Review of a Research Publication)	CC				3
MTC161	Seminar II (Critical Review of a Research Publication)	CC				3
Domain Elective I : Choose any one from the following courses						
MTC104	Software Project Planning & Management	DE	2	1		3
MTC105	Advance DBMS	DE	2	1		3
Value Added Courses						
BCS111	Communication Skills – I	VA	1			1
BSS111	Behavioural Science –I (Self Development and Interpersonal Skills)	VA	1			1
FLT111 FLG111 FLS111 FLC111	Foreign Language – I French German Spanish Chinese	VA	2			2
	Total					**23**

SECOND SEMESTER

Code	Course	Category	L	T	P/FW	Credit Units
MTC201	Compiler Design	CC	2	1		3
MTC202	Enterprise Java Application using J2EE	CC	2	1		3
MTC203	Advanced Computer Networks	CC	2	1		3
MTC204	Soft Computing	CC	2	1		3
MTC221	Compiler Design Lab	CC			2	1
MTC222	Enterprise Java Application using J2EE Lab	CC			2	1
MTC223	Advanced Computer Networks Lab	CC			2	1
MTC260	Minor Project	CC				5
Domain Elective II : Choose any one from the following courses						
MTC205	Cloud Computing	DE	2	1		3
MTC206	Advanced Computer Organization	DE	2	1		3
MTC207	Computer Oriented Operational Research	DE	2	1		3
OPEN ELECTIVE						
	OPEN ELECTIVEI	OE	3			3
VALUE ADDED						
BCS211	Communication Skills – II	VA	1			1
BSS211	Behavioural Science –II (Behavioral Communication and Relationship Management)	VA	1			1
FLT211 FLG211 FLS211 FLC211	Foreign Language – II French German Spanish Chinese	VA	2			2
	Total					**30**

THIRD SEMESTER

Code	Course	Category	L	T	P/FW	Credit Units
MTC301	Data Warehousing & Data Mining	CC	2	1		3
MTC302	Network Security & Management	CC	2	1		3
MTC321	Data Warehousing & Data Mining Lab	CC			2	1
MTC360	Dissertation (Evaluation of Plan and Critical Literature Review)	CC				3
Domain Elective : Choose any one from the following courses (Lab Courses to be clubbed with their respective theory courses)						
MTC303	Pattern Recognition & Image Processing	DE	2	1		3
MTC322	Pattern Recognition & Image Processing Lab	DE			2	1
MTC304	ASP. NET	DE	2	1		3
MTC324	ASP. NET Lab	DE			2	1
MTC305	Real Time Operating System	DE	3	1		4
MTC306	Mobile Computing	DE	3	1		4
MTC307	Ad Hoc & Wireless Sensor Network	DE	3	1		4
OPEN ELECTIVE						
	OPEN ELECTIVEII	OE	3			3
VALUE ADDED						
BCS311	Communication Skills – III	VA	1			1
BSS311	Behavioural Science –III (Leading Through Teams)	VA	1			1
FLT311 FLG311 FLS311 FLC311	Foreign Language – III French German Spanish Chinese	VA	2			2
	Total					**21**

FOURTH SEMESTER

Code	Course	Category	L	T	P/FW	Credit Units
MTC455	Dissertation	CC				30
	TOTAL					**30**