



ADAMAS UNIVERSITY

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

POSTGRADUATE PROGRAM

Course Structure and Syllabus

MCA

W.e.f. AY 2022-23



ADAMAS UNIVERSITY
SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
PG Program: MCA

COURSE STRUCTURE

FIRST YEAR

(Common for all streams)

SEMESTER I							
S.No.	Course Code	Course Title	L	T	P	H	C
1		Introduction to Programming	3	0	0	3	3
2		Numerical & Statistical Methods	3	0	0	3	3
3		Computer Organization & Architecture	3	0	0	3	3
4		Software Engineering	3	0	0	3	3
5		HSSM- I (English Communication)	3	0	0	3	2
6		Operating System	3	0	0	3	3
7		Introduction to Programming Lab	0	0	3	3	2
8		Numerical & Statistical Methods Lab.	0	0	3	3	2
9		Computer Organization & Architecture Lab.	0	0	3	3	2
10		Operating System Lab	0	0	3	3	2
Semester I Total			18	0	12	30	25

SEMESTER II							
S.No.	Course Code	Course Title	L	T	P	H	C
1		Switching Circuits and Logic Design	3	0	0	3	3
2		Object Oriented Programming with Java	3	0	0	3	3
3		Data Structures	3	0	0	3	3
4		Database Management System	3	0	0	3	3
5		Mathematics for Computer Application	3	0	0	3	3
6		Python Programming Lab	0	0	3	3	2
7		Object Oriented Programming with Java Lab	0	0	3	3	2
8		Data Structures Lab	0	0	3	3	2
		Database Management System Lab	0	0	3	3	2
Semester II Total			15	0	12	27	23

1st Year Credits = 48

SECOND YEAR

SEMESTER III							
S.No.	Course Code	Course Title	L	T	P	H	C
1		Design and Analysis of Algorithms	3	0	0	3	3
2		Data Communication & Computer Network	3	0	0	3	3
3		Graph Theory	3	0	0	3	2
4		Formal Language and Automata Theory	3	0	0	3	3
5		Elective – I	3	0	0	3	3
		Artificial Intelligence and Machine Learning					
		Fundamentals of Cloud Computing					
6		Elective – II	3	0	0	3	3
		Natural Language Processing and Its Application					
		Cloud Storage					
		Data Warehousing & Data Analytics					
7		Web Technology Lab	0	0	3	3	2
8		Mobile Applications using Android/IOS Lab	0	0	3	3	2
9		Elective Course – I Lab	0	0	3	3	2
		Artificial Intelligence and Machine Learning Lab					
		Fundamentals of Cloud Computing Lab					
10		Project - I	0	0	3	3	2
Semester III Total			18	0	12	30	26

SEMESTER IV							
S.No.	Course Code	Course Title	L	T	P	H	C
1		Elective Course – III	3	0	0	3	3
		Pattern Recognition					
		Public Blockchain					
		Cyber Security and Cryptography					
2		HSS-VI (Basics of Organizational Behaviours)	3	0	0	3	3
3		Compiler Design	3	0	0	3	3
4		Elective Course – III Lab	0	0	3	3	2
		Pattern Recognition Lab					
		Public Blockchain Lab					
		Cyber Security and Cryptography Lab					
5		Seminar	0	2	0	2	2
		Project – II	0	0	6	6	4
Semester IV Total			9	0	9	20	17

2nd Year Total : 43

CREDIT DISTRIBUTION (SEMESTER-WISE)

SEM I	SEM II	SEM III	SEM IV	TOTAL
25	23	26	17	91

CREDIT DISTRIBUTION (YEAR-WISE)

YEAR I	YEAR II	YEAR III	YEAR IV
40	40	40	120