

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MASTER OF COMPUTER APPLICATIONS (MCA)
Effective from Academic Year 2022-23 Admitted Batch

COURSE STRUCTURE & SYLLABUS (R22)

I YEAR I SEMESTER

Category	Course Title	L	T	P	Credits
Core Course - I	Mathematical Foundations of Computer Science	3	0	0	3
Core Course - II	C Programming and Data Structures	3	1	0	4
Core Course – III	Python Programming	3	0	0	3
Core Course – IV	Operating Systems	3	0	0	3
Core Course – V	Accounting and Financial Management	3	0	0	3
Laboratory – I	C Programming and Data Structures Lab	0	0	3	1.5
Laboratory – II	Python Programming Lab	0	0	2	1
Laboratory – III	Operating Systems Lab	0	0	3	1.5
	Total Credits	15	1	8	20

I YEAR II SEMESTER

Category	Course Title	L	T	P	Credits
Core Course - I	Java Programming	3	0	0	3
Core Course - II	Database Management Systems	3	0	0	3
Core Course – III	Computer Networks	3	0	0	3
Core Course – IV	Data Mining	3	0	0	3
Core Course – V	Software Engineering	3	0	0	3
Laboratory – I	Database Management Systems Lab	0	0	4	2
Laboratory – II	Computer Networks Lab	0	0	3	1.5
Laboratory – III	Java Programming Lab	0	0	3	1.5
	Total Credits	15	0	10	20

II YEAR I SEMESTER

Category	Course Title	L	T	P	Credits
Core Course - I	Enterprise Cloud Concepts	3	0	0	3
Core Course - II	Full Stack Development	3	0	0	3
Core Course – III	Machine Learning	3	0	0	3
Professional Elective - I	Professional Elective - I Artificial Intelligence Information Retrieval Systems Ad-hoc and Sensor Networks	3	0	0	3
Professional Elective - II	Professional Elective - II Cyber Security Mobile Computing Software Testing Methodologies	3	0	0	3
Laboratory – I	Enterprise Cloud Concepts Lab	0	0	3	1.5
Laboratory – II	Full Stack Development Lab	0	0	3	1.5
Laboratory – III	Machine Learning Lab	0	1	2	2
	Total Credits	15	1	8	20

II YEAR II SEMESTER

Category	Course Title	L	T	P	Credits
Professional Elective - III	Professional Elective - III Internet of Things Mobile Application Development Big Data Analytics	3	0	0	3
Open Elective - I	Open Elective - I e-Commerce Cyber Laws and Privacy Management Information System Entrepreneurship	3	0	0	3
Seminar	Seminar	0	0	4	2
Project	Project Work Review - III	0	0	4	2
Project	Project Viva-Voce	0	0	20	10
	Total Credits	6	0	24	20

***Note:** Please refer Academic Regulations for Project Work Review – I & II.