



**VELAGAPUDI RAMAKRISHNA
SIDDHARTHA ENGINEERING COLLEGE**

DEEMED TO BE UNIVERSITY

(Under Section 3 of UGC Act, 1956)

Kanuru, Vijayawada - 520 007, AP. www.vrsiddhartha.ac.in

(Sponsored by Siddhartha Academy of General & Technical Education)

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SCHOOL OF SCIENCE
SCHEME OF INSTRUCTION FOR MCA PROGRAMME
w.e.f. 2024-25

SEMESTER I

CONTACT HOURS: 29/week

S. No.	Course Code	Course Category	Course Name	L	T	P	C
1.	24CA501	PC	Problem Solving with Python	2	0	3	3.5
2.	24CA502	PC	Data Structures using OOP	3	0	2	4
3.	24CA503	PC	Computer Networks	2	0	2	3
4.	24CA504	PC	AI Tools and Applications	2	0	2	3
5.	24MA501	BS	Discrete Mathematics	2	0	2	3
6.	24EN501	HS	Professional Communication	2	0	3	3.5
7.	24MA581	HS	Personality Development Course-1 (Logical Reasoning and Aptitude)	0	0	2	1
Total				13	0	16	21

SEMESTER II

CONTACT HOURS: 29/week

S. No.	Course Code	Course Category	Course Name	L	T	P	C
1.	24CA505	PC	Database Management Systems	3	0	2	4
2.	24CA506	PC	OOPs with JAVA	3	0	2	4
3.	24CA507	PC	Cryptography and Network Security	2	0	2	3
4.	24CA508	Program Elective-I	A. Data Mining B. Operating Systems C. Design & Analysis of Algorithms D. Software Engineering	2	0	2	3
5.	24MA502	BS	Probability and Statistics	3	0	2	4
6.	24EN502	HS	Business Communication	2	0	2	3
7.	24EN581	HS	Personality Development Course-2 (English, Campus Recruitment Training)	0	0	2	1
Total				15	0	14	22

SEMESTER III**CONTACT HOURS: 30/week**

S. No.	Course Code	Course Category	Course Name	L	T	P	C
1.	24CA601	PC	Machine Learning using Python	3	0	2	4
2.	24CA602	PC	Cyber Security	2	0	2	3
3.	24CA603	PC	Big Data Analytics	2	0	2	3
4.	24CA604	PC	Web Design and Development	3	0	2	4
5.	24CA605	PC	Cloud Computing	2	0	2	3
6.	24CA606	PE Elective-II	A. DS and AI for Management Applications B. Distributed Systems C. Computer Graphics D. Software Project Management	2	0	2	3
7.	24CA681	PR	Mini Project	0	0	4	2
Total				14	0	16	22

SEMESTER IV**CONTACT HOURS: 27/week**

S. No.	Course Code	Course Category	Course Name	L	T	P	C
1.	24CA607	PC	Full Stack Web Development	2	0	2	3
2.	24CA608	Program Elective-III	A. Deep Learning B. Dot Net Programming C. Digital Image Processing D. Software Testing	2	0	2	3
3.	24CA609	Program Elective-IV	A. Advanced Database Technology B. Research Methodology C. Self-Learning Course	3	0	0	3
4.	24CA682	PR	Major Project	0	0	16	8
Total				7	0	20	17

CREDIT DISTRIBUTION - Category wise and Semester wise - MCA24

	PC (Program Core)	PE (Program Elective)	HS (Humanities & Sciences)	BS (Basic Sciences)	PR (Project)	Total
Sem-1	13.5	0	4.5	3	0	21
Sem-2	11	3	4	4	0	22
Sem-3	17	3	0	0	2	22
Sem-4	3	6	0	0	8	17
Total	44.5	12	8.5	7	10	82

V. E. Tyot

Head, Dept. of Computer Applications

[Signature]
Dean - Schools of MLSAC