

V.R.SIDDHATHA ENGINEERING COLLEGE

DEPARTMENT OF COMPUTER APPLICATIONS

Scheme of Instruction(MCA20 Regulation)

Semester	Number of Credits
I	21.5
II	22
III	21.5
IV	15
Total Credits	80

SEMESTER – I

S. No.	Subject Code	Subject Title	L	T	P	C	CE	SE	Tot
1	20MCA2101	Data Structures	3	1	-	4	40	60	100
2	20MCA2102	Database Management Systems	3	1	-	4	40	60	100
3	20MCA1103	Discrete Mathematics	3	-	-	3	40	60	100
4	20MCA2104	Computer Networks	3	-	-	3	40	60	100
5	20MCA2105	Operating Systems	3	-	-	3	40	60	100
6	20MCA2151	Data Structures Using C Lab	-	-	3	1.5	40	60	100
7	20MCA2152	Database Management Systems Lab	-	-	3	1.5	40	60	100
8	20MCA1153	Professional Communication Skills Lab	-	-	3	1.5	40	60	100
9	20MCA4154	Personality Development Course (Logical Reasoning and English for Professionals)	-	-	2	0	100	-	100
			15	2	11	21.5	420	480	900

L: Lecture

T: Tutorial

P: Practical

C: Credits

CE: Continuous Evaluation

SE: Semester End Evaluation

Tot: Total Marks

SEMESTER – II

S. No.	Subject Code	Subject Title	L	T	P	C	CE	SE	Tot
1	20MCA2201	Python Programming	3	-	-	3	40	60	100
2	20MCA2202	Object Oriented Programming through Java	3	1	-	4	40	60	100
3	20MCA2203	Software Engineering	3	-	-	3	40	60	100
4	20MCA2204	Data Mining	3	1	-	4	40	60	100
5	20MCA2205	<u>Program Elective – I</u> A: Design and analysis of Algorithms B: Artificial Intelligence C: Cryptography & Network Security D: Information Retrieval Systems	3	-	-	3	40	60	100
6	20MCA2251	Python Programming Lab	-	-	3	1.5	40	60	100
7	20MCA2252	Object Oriented Programming Through Java Lab	-	-	3	1.5	40	60	100
8	20MCA2253	Statistics with R Programming Lab	-	1	2	2	40	60	100
9	20MCA4254	Personality Development Course (Aptitude and Campus Recruitment Training)	-	-	2	0	100	-	100
			15	3	10	22	420	480	900

L: Lecture

T: Tutorial

P: Practical

C: Credits

CE: Continuous Evaluation

SE: Semester End Evaluation

Tot: Total Marks

SEMESTER – III

S. No.	Subject Code	Subject Title	L	T	P	C	CE	SE	Tot
1	20MCA2301	Machine Learning	3	1	-	4	40	60	100
2	20MCA2302	Cyber Security	3	1	-	4	40	60	100
3	20MCA2303	Program Elective – II	3	-	-	3	40	60	100
4	20MCA2304	Industrial Management	3	-	-	3	40	60	100
5	20MCA2305	Big Data Analytics	3	-	-	3	40	60	100
6	20MCA2351	Machine Learning with Python Lab	-	-	3	1.5	40	60	100
7	20MCA2352	Advanced Java Programming Lab	-	-	3	1.5	40	60	100
8	20MCA3353	Mini Project	-	-	3	1.5	40	60	100
			15	2	9	21.5	320	480	800

Program Elective – II

20MCA2303A: Computer Graphics

20MCA2303B: Distributed Systems

20MCA2303C: Advanced Database Technology

20MCA2303D: Human Computer Interaction

SEMESTER – IV

S. No.	Subject Code	Subject Title	L	T	P	C	CE	SE	Tot
1	20MCA2401	Program Elective - III	3	-	-	3	40	60	100
2	20MCA3451	Major Project	-	-	24	12	40	60	100
			3	-	24	15	80	120	200

Program Elective – III

20MCA2401A: Software Testing Methodologies

20MCA2401B: Angular JS

20MCA2401C: Cloud Computing

20MCA2401D: Any other MOOCS course offered by the department

L: Lecture**T:** Tutorial**P:** Practical**C:** Credits**CE:** Continuous Evaluation**SE:** Semester End Evaluation**Tot:** Total Marks

Following are the MOOCs Courses offered by SWAYAM NPTEL (January-April, 2022) for the students admitted in 2020-21 that has been discussed and approved:

20MCA2401D1: Data Analytics with Python

20MCA2401D2: Object Oriented System Development using UML, Java and Patterns

20MCA2401D3: Introduction to Internet of Things

20MCA2401D4: Deep Learning

20MCA2401D5: Blockchain and its Applications

20MCA2401D6: Computer Architecture