AMAL JYOTHI
COLLEGE OF ENGINEERING
(A U T O N O M O U S)

CURRICULUM - MCA - REGULAR
YEAR: 2023

SEMESTER I - MCA - REG

No	Course Code	Course	Hours/week L	Hours/week T	Hours/week P	CIE Marks	ESE Marks	Total	ESE Pass	Total Pass	Credits
1	23MCA101	Mathematical Foundations for Computing	3	1	0	40	60	100	24	50	4
2	23MCA103	Digital Fundamentals & Computer Architecture	3	1	0	40	60	100	24	50	4
3	23MCA105	Advanced Data Structures	3	1	0	40	60	100	24	50	4
4	23MCA107	Advanced Software Engineering	3	1	0	40	60	100	24	50	4
5	23MCA131	Programming Lab	0	1	3	50	50	100	20	50	2
6	23MCA133	Web Programming Lab	0	1	3	50	50	100	20	50	2
7	23MCA135	Data Structures Lab	0	1	3	50	50	100	20	50	2
8	23MCANC1	Entrepreneurship & Innovations in Technology	0	0	1	0	0	0	0	0	0
9	23MCANC4	MOOC Course	0	0	0	0	0	0	0	0	0
			12	7	10	310	390	700			22

SEMESTER II - MCA - REG

No	Course Code	Course	Hours/week L	Hours/week T	Hours/week P	CIE Marks	ESE Marks	Total	ESE Pass	Total Pass	Credits
1	23MCA102	Advanced Database Management Systems	3	1	0	40	60	100	24	50	4
2	23MCA104	ADVANCED COMPUTER NETWORKS	3	1	0	40	60	100	24	50	4
3	--	Elective I	3	1	0	40	60	100	24	50	4
4	--	Elective II	3	1	0	40	60	100	24	50	4
5	23MCA132	Object Oriented Programming Lab	0	1	3	50	50	100	20	50	2
6	23MCA134	Advanced DBMS Lab	0	1	3	50	50	100	20	50	2
7	23MCA136	Networking & Systems Administration Lab	0	1	3	50	50	100	20	50	2
8	23MCANC2	Industrial Readiness Training	0	0	1	0	0	0	0	0	0
			12	7	10	310	390	700			22

SEMESTER III - MCA - REG

No	Course Code	Course	Hours/week L	Hours/week T	Hours/week P	CIE Marks	ESE Marks	Total	ESE Pass	Total Pass	Credits
1	23MCA201	Data Science & Machine Learning	3	1	0	40	60	100	24	50	4
2	23MCA203	Design & Analysis of Algorithms	3	1	0	40	60	100	24	50	4
3	--	Elective III	3	1	0	40	60	100	24	50	4
4	--	Elective IV	3	1	0	40	60	100	24	50	4
5	23MCA241	Data Science Lab	0	1	3	50	50	100	20	50	2
6	23MCA243	Mobile Application Development Lab	0	1	3	50	50	100	20	50	2
7	23MCA245	MINI PROJECT	0	0	4	50	50	100	20	50	2
8	23MCANC3	Domain Expertise Workshops	0	0	1	0	0	0	0	0	0
			12	6	11	310	390	700			22

SEMESTER IV - MCA - REG

No	Course Code	Course	L	T	P	CIE Marks	ESE Marks	Total	ESE Pass	Total Pass	Credits
1	23MCA242	Comprehensive Viva	0	0	0	0	100	100	50	50	6
2	23MCA244	Seminar	0	0	2	0	50	50	0	25	2
3	23MCA246	Main Project	0	0	27	70	30	100	15	50	12
			0	**0**	**29**	**70**	**180**	**250**			**20**

MCA - REGULAR	Total Marks : 2350	Total Credits : 86

Elective I - MCA - REG

No	Course Code	Course	L	T	P	CIE Marks	ESE Marks	Total	ESE Pass	Total Pass	Credits
1	23MCA162	Applied Statistics	3	1	0	40	60	100	24	50	4
2	23MCA164	Organizational Behaviour	3	1	0	40	60	100	24	50	4
3	23MCA166	Functional Programming	3	1	0	40	60	100	24	50	4
4	23MCA168	Virtualisation and Containers	3	1	0	40	60	100	24	50	4
5	23MCA172	ADVANCED OPERATING SYSTEMS	3	1	0	40	60	100	24	50	4

Elective II - MCA - REG

No	Course Code	Course	L	T	P	CIE Marks	ESE Marks	Total	ESE Pass	Total Pass	Credits
1	23MCA182	Business Management	3	1	0	40	60	100	24	50	4
2	23MCA184	Embedded Systems	3	1	0	40	60	100	24	50	4
3	23MCA186	COMPUTER GRAPHICS	3	1	0	40	60	100	24	50	4
4	23MCA188	Artificial Intelligence	3	1	0	40	60	100	24	50	4
5	23MCA192	IPR and Cyber Laws	3	1	0	40	60	100	24	50	4

Elective III - MCA - REG

No	Course Code	Course	L	T	P	CIE Marks	ESE Marks	Total	ESE Pass	Total Pass	Credits
1	23MCA261	Operations Research	3	1	0	40	60	100	24	50	4
2	23MCA263	Cyber Security & Cryptography	3	1	0	40	60	100	24	50	4
3	23MCA265	CLOUD COMPUTING	3	1	0	40	60	100	24	50	4
4	23MCA267	CYBER FORENSICS	3	1	0	40	60	100	24	50	4
5	23MCA269	Compiler Design	3	1	0	40	60	100	24	50	4

Elective IV - MCA - REG

No	Course Code	Course	L	T	P	CIE Marks	ESE Marks	Total	ESE Pass	Total Pass	Credits
1	23MCA281	INTERNET OF THINGS	3	1	0	40	60	100	24	50	4
2	23MCA283	DEEP LEARNING	3	1	0	40	60	100	24	50	4
3	23MCA285	Digital Image Processing	3	1	0	40	60	100	24	50	4
4	23MCA287	BIOINFORMATICS	3	1	0	40	60	100	24	50	4
5	23MCA289	SOCIAL NETWORK ANALYSIS	3	1	0	40	60	100	24	50	4