

Integrated BCA+MCA Curriculum

Semester I						
SN	Name of the Course	L	T	P	S	C
1	Mathematics for Computing	3	0	0	0	3
2	Computer System Organisation	3	0	0	0	3
3	Programming for Problem Solving	3	0	1	1	5
4	Office Automation Tools	3	0	1	0	4
5	Business Communication & Report Writing	3	0	0	0	3
	Total Credits	15	0	2	1	18
Semester II						
SN	Name of the Course	L	T	P	S	C
1	Discrete Mathematics	3	0	0	0	3
2	First Aid & Health	3	0	0	0	3
3	Data Structures	3	0	1	0	4
4	Object Oriented Programming using C++	3	0	1	1	5
5	Database Management Systems	3	0	1	0	4
6	Web Design	3	0	1	0	4
	Total Credits	18	0	4	1	23
Semester III						
SN	Name of the Course	L	T	P	S	C
1	Computer Networks	3	0	0	0	3
2	Operating Systems	3	0	1	0	4
3	Full Stack Development using React & Node.js	3	0	1	0	4
4	Entrepreneurship/ E-Business (MOOC)	3	0	0	0	3
5	Java Programming	3	0	1	1	5
6	Elective-I (Human Computer Interaction/System Admin/Digital Marketing)	3	0	0	0	3
	Total Credits	18	0	3	1	22
Semester IV						
SN	Name of the Course	L	T	P	S	C
1	Python Programming	3	0	1	0	4
2	Machine Learning	3	0	1	1	5
3	Mobile Application Development	3	0	1	1	5
4	Environmental Studies/ Understanding India/Cognitive Computing	3	0	0	0	3
5	Elective-II (Generative AI /Internet of Things /Computer Graphics)	3	0	0	0	3
	Total Credits	15	0	3	2	20
Semester V						
SN	Name of the Course	L	T	P	S	C
1	Design and Analysis of Algorithms	3	0	1	0	4
2	Software Engineering and Testing	3	0	0	0	3
3	Elective-III (Virtual Reality/Cryptography & Blockchain)	3	0	0	0	3
4	Professional Readiness	0	0	2	0	2
5	Minor Project	0	0	0	5	5
6	Internship	0	0	0	5	5
	Total Credits	9	0	3	10	22
Semester VI						
SN	Name of the Course	L	T	P	S	C
1	Capstone Project	0	0	0	15	15
	Total Credits	0	0	0	15	15
Open Elective Basket						
SN	Name of the Course	L	T	P	S	C
1	Business Communication & Report Writing	3	0	0	0	3
2	First Aid & Health	3	0	0	0	3
3	Food Nutrition & Hygiene	3	0	0	0	3
4	NCC/NSS	3	0	0	0	3
5	Human Values	3	0	0	0	3
6	Yoga & Meditation	3	0	0	0	3
7	Entrepreneurship (MOOC)	3	0	0	0	3
8	E-Business (MOOC)	3	0	0	0	3
9	Understanding India	3	0	0	0	3
10	Environmental Studies	3	0	0	0	3
11	Introduction to Cognitive Computing	3	0	0	0	3
Elective-I (Semester 3)						
SN	Name of the Course	L	T	P	S	C
1	Human Computer Interaction	3	0	0	0	3
2	System Administration	2	0	1	0	3
3	Digital Marketing	3	0	0	0	3
Elective-II (Semester 4)						
SN	Name of the Course	L	T	P	S	C
1	Generative AI	3	0	0	0	3
2	Internet of Things	3	0	0	0	3
3	Computer Graphics	2	0	1	0	3
Elective-III (Semester 5)						
SN	Name of the Course	L	T	P	S	C
1	Virtual Reality	3	0	0	0	3
2	Cryptography & Blockchain	3	0	0	0	3

Semester VII							
SNo.	Name of the Course	L	T	P	S	C	H
1	Problem Solving and Computer Programming	3	0	1	0	4	5
2	Computational Mathematics and Statistics	3	0	0	0	3	3
3	Database Management System	3	0	1	0	4	5
4	Digital Computer Organization	3	0	0	0	3	3
6	English Proficiency and Aptitude Building	0	0	2	0	2	4
5	Introduction to IT [Bridge Course])	3	0	1	0	4	5
Total Credits (MCA & MCA IOP)		15	0	5	0	20	25

Semester VIII							
SNo.	Name of the Course	L	T	P	S	C	H
1	Object Oriented Programming with Java	3	0	1	0	4	5
2	Machine Learning with Python	3	0	1	1	5	8
3	Data Structures	3	0	1	0	4	5
4	Verbal and Quantitative Reasoning	0	0	2	0	2	4
5	Data Communication & Networking	2	0	0	0	2	2
6	Operating Systems	2	0	0	0	2	2
7	Elective-I	3				3	3
8	Training-I	0	0	1	0	1	2
Total Credits (MCA)		16	0	6	1	23	31

Elective-I for VIII sem							
SNo.	Name of the Course	L	T	P	S	C	H
1	BlockChain	3	0	0	0	3	3
2	Cognitive Computing and Modeling	3	0	0	0	3	3
3	Internet of Things	3	0	0	0	3	3
4	Data Science with R	2	0	1	0	3	3

Semester IX							
SNo.	Name of the Course	L	T	P	S	C	H
1	Mobile App Development	3	0	1	1	5	8
2	Design & Analysis of Algorithm	3	0	1	0	4	5
3	Elective-II	3	0	0	0	3	3
4	Elective-III	2	0	1	0	3	3
5	Professional Readiness	0	0	2	0	2	4
6	Minor Project	0	0	2	0	2	0
7	Internship	0	0	4	0	4	0
8	Training-II	0	0	1	0	1	2
Total Credits (MCA)		11	0	12	1	24	25

Elective-II for IX sem							
SNo.	Name of the Course	L	T	P	S	C	H
1	Software Engineering and Testing	3	0	0	0	3	3
2	Big Data	3	0	0	0	3	3
3	Digital Image Processing	3	0	0	0	3	3

Elective -III for IX sem							
SNo.	Name of the Course	L	T	P	S	C	H
1	Advanced Java Programming	2	0	1	0	3	4
2	Web Technology	2	0	1	0	3	4

Semester X							
SNo.	Name of the Course	L	T	P	S	C	H
1	Major Project	0	0	0	0	20	
Total Credits (MCA & MCA IOP)						20	