

ABES Institute of Technology, Ghaziabad

MCA (MASTER OF COMPUTER APPLICATION)

MCA FIRST YEAR (SEMESTER-I)

S.No .	Subject Code	Subject Name	Periods			Sessional			ESE	Total	Credit
			L	T	P	CT	TA	Total			
1.	KCA101	Fundamental of Computers & Emerging Technologies	3	0	0	30	20	50	100	150	3
2.	KCA102	Problem Solving using C	3	1	0	30	20	50	100	150	4
3.	KCA103	Principles of Management & Communication	3	0	0	30	20	50	100	150	3
4.	KCA104	Discrete Mathematics	3	0	0	30	20	50	100	150	3
5.	KCA105	Computer Organization & Architecture	3	1	0	30	20	50	100	150	4
6.	KCA151	Problem Solving using C Lab	0	0	4	30	20	50	50	100	2
7.	KCA152	Computer Organization & Architecture Lab	0	0	3	30	20	50	50	100	2
8.	KCA153	Professional Communication Lab	0	0	2	30	20	50	50	100	2
Total										1050	23

CT: Class Test **TA:** Teacher Assessment

L/T/P: Lecture/ Tutorial/ Practical

MCA FIRST YEAR (SEMESTER-II)

S.No .	Subject Code	Subject Name	Periods			Sessional			ESE	Total	Credit
			L	T	P	CT	TA	Total			
1.	KCA201	Theory of Automata & Formal Languages	3	0	0	30	20	50	100	150	3
2.	KCA202	Object Oriented Programming	3	1	0	30	20	50	100	150	4
3.	KCA203	Operating Systems	3	0	0	30	20	50	100	150	3
4.	KCA204	Database Management Systems	3	0	0	30	20	50	100	150	3
5.	KCA205	Data Structures & Analysis of Algorithms	3	1	0	30	20	50	100	150	4
6.	KCAA01	Cyber Security*	2	0	0	30	20	50	100	150	0
7.	KCA251	Object Oriented Programming Lab	0	0	3	30	20	50	50	100	2
8.	KCA252	DBMS Lab	0	0	3	30	20	50	50	100	2
9.	KCA253	Data Structures & Analysis of Algorithms Lab	0	0	4	30	20	50	50	100	2
Total										1200	23

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L/T/P: Lecture/ Tutorial/ Practical

*** Qualifying Non-credit Course**

ABES Institute of Technology, Ghaziabad

MCA SECOND YEAR (SEMESTER-III)

S. No.	Subject Code	Subject Name	Periods			Sessional			ESE	Total	Credit
			L	T	P	CT	TA	Total			
1.	KCA301	Artificial Intelligence	3	0	0	30	20	50	100	150	3
2.	KCA302	Software Engineering	4	0	0	30	20	50	100	150	4
3.	KCA303	Computer Network	3	1	0	30	20	50	100	150	4
4.		Elective – 1	3	0	0	30	20	50	100	150	3
5.		Elective – 2	3	1	0	30	20	50	100	150	3
6.	KCA351	Artificial Intelligence Lab	0	0	3	30	20	50	50	100	2
7.	KCA352	Software Engineering Lab	0	0	3	30	20	50	50	100	2
8.	KCA353	Mini Project**	0	0	4	30	20	50	50	100	2
Total										1050	23

CT: Class Test **TA:** Teacher Assessment **L/T/P:** Lecture/ Tutorial/ Practical

MCA SECOND YEAR (SEMESTER-IV)

S. No.	Subject Code	Subject Name	Periods			Sessional			ESE	Total	Credit
			L	T	P	CT	TA	Total			
1.		Elective – 3	3	0	0	30	20	50	100	150	3
2.		Elective – 4	3	0	0	30	20	50	100	150	3
3.		Elective – 5	3	0	0	30	20	50	100	150	3
4.	KCA451	Project	-	-	-	-	200	200	500	700	14
Total										1050	23

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** The Mini Project (6 weeks) conducted during summer break after II semester and will be assessed during III semester. The Course will be carried out at the Institute under the guidance of a Faculty Members.

Elective-1	KCA011	Cryptography & Network Security
	KCA012	Data Warehousing & Data Mining
	KCA013	Software Project Management
	KCA014	Cloud Computing
	KCA015	Compiler Design

Elective-2	KCA021	Web Technology
	KCA022	Big Data
	KCA023	Simulation & Modeling
	KCA024	Software Testing & Quality Assurance

Elective-3	KCA031	Privacy & Security in Online Social Media
	KCA032	Soft Computing
	KCA033	Pattern Recognition
	KCA034	Data Analytics
	KCA035	Software Quality Engineering

Elective-4	KCA041	Blockchain Architecture
	KCA042	Neural Network
	KCA043	Internet of Things
	KCA044	Modern Application Development
	KCA045	Distributed Database Systems

Elective-5	KCA051	Mobile Computing	KCA054	Machine Learning
	KCA052	Computer Graphics and Animation	KCA055	Quantum Computing
	KCA053	Natural Language Processing		

