## Galgotias University School of Computer Applications and Technology

## **MCA IOP Computer Network & Cyber Security**

Credis

SEM	Ι	II	III	IV	TOTAL
MCA IOP	20	26	27	20	93

	Semester 1						
SNo.	Name of the Course	L	T	P	S	C	Η
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 II						
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
8	Cyber Security	3	0	0	0	3	3
	Total Credits (MCA IOP)	19	0	6	1	26	34

	Elective-I for II sem						
SNo.	Name of the Course	L	T	P	S	C	Н
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 III						
SNo.	Name of the Course	L	T	P	S	C	H
1	Ethical Hacking (CNCS)	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
9	Cryptography and Network Security	2	0	1	0	3	3
·	Total Credits (MCA IOP)	13	0	13	1	27	28

	Elective-II for III sem						
SNo.	Name of the Course	L	T	P	S	C	Н
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
4	Information Security and Network Defense	3	0	0	0	3	3

	Elective -III for III sem						
SNo.	Name of the Course	L	T	P	S	C	Н
1	Advanced Java Programming	2	0	1	0	3	4
2	Web Technology	2	0	1	0	3	4
3	Cyber Security with AIML	2	0	1	0	3	4

	Semester IV						
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	