

Galgotias University
School of Computing Science and Engineering
Curriculum MCA & MCA IOP 2023-25
Program Structure of Bridge Course for MCA

Credits	I	II	III	IV	TOTAL
MCA	21	22	24	23	90
MCA IOP	25	26	28	23	102

Semester I													
Sl. No	Course Code	Name of the Course						Assessment Pattern			EMP	EP	SKILL
			L	T	P	C	H	IA	MTE	ETE			
S No.	Course Code	Course Name	L	T	P	C	H	20	30	50			
1	MCAN1011	Introduction to Information Technology	2	0	0	2	2	20	30	50	✓		
2	MCAN1012	Fundamentals of Digital Computers	2	0	0	2	2	20	30	50	✓		
		Total Credits				4							

Program Structure of MCA and MCA Specializations

Semester I													
S No.	Course Code	Name of the Course						Assessment Pattern			EMP	EP	SKILL
			L	T	P	C	H	IA	MTE	ETE			
S No.	Course Code	Course Name	L	T	P	C	H	20	30	50			
1	MCAN1110	Problem Solving and Computer Programming	2	0	0	2	2	20	30	50	✓		

Value added Course

2	MCAN1120	Discrete Mathematics	3	0	0	3	3	20	30	50			
3	MCAN1130	Operating System with Linux	3	0	0	3	3	20	30	50	✓		
4	MCAN1140	Database Management System	3	0	0	3	3	20	30	50	✓		
5	MCAN1150	Data Communication & Networking	3	0	0	3	3	20	30	50	✓		
6	MCAS1171	Problem Solving Techniques Lab	0	0	4	2	4	50		50			✓
7	MCAN1131	Operating System with Linux Lab	0	0	2	1	2	50		50			✓
8	MCAN1141	Database Management System Lab	0	0	2	1	2	50		50			✓
9	MCAN1151	Data Communication & Networking Lab	0	0	2	1	2	50		50			✓
10	SLMC5011	English Proficiency and Aptitude Building -1	0	0	4	2	4	50		50			✓
Total Credits (MCA)						21	28						
13		Specialize Core Theory-I	3	0	0	3		20	15	30	✓		
14		Specialize Core Lab -I	0	0	2	1		15		20			✓
Total Credits (MCA Spl)						25	32						

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Semester II														
SI No	Course Code	Name of the Course						Assessment Pattern			EMP	EP	SKILL	Value added Course
			L	T	P	C	H	IA	MTE	ETE				
1	MCAN1210	Object Oriented Programming with Java	3	0	0	3	3	20	30	50	✓			
2	MCAN1240	Software Engineering and Testing	3	0	0	3	3	20	30	50	✓			
3	MCAN1250	Programming with Python	3	0	0	3	3	20	30	50	✓			
4		Data structure Using C	3	0	0	3	3	20	30	50	✓			
5	MCAN1290	Web Technologies	3	0	0	3	3	20	15	30	✓			
6	SLMC5012	English Proficiency and Aptitude Building – 2	0	0	4	2	4	100					✓	
7	MCAN1001	Technical Training-I	0	0	2	1	2	100					✓	
8	MCAN1211	Object Oriented Programming with Java Lab	0	0	2	1	2	100					✓	
9	MCAN1251	Programming with Python Lab	0	0	2	1	2	100					✓	
10		Data structure Using C Lab	0	0	2	1	2	100					✓	
11	MCAN1291	Web Technologies PBL Lab	0	0	2	1	2	35					✓	

Code Chef

		Total Credits (MCA)				22	29						
12		Specialize Core Theory -II	3	0	0	3		20	15	30	✓		
13		Specialize Core Lab-II	0	0	2	1		35					✓
		Total Credits (MCA Spl)				26	34						

Semester III													Value added Course	
SI No	Course Code	Name of the Course						Assessment Pattern			EMP	EP		SKILL
			L	T	P	C	H	IA	MTE	ETE				
1	MCAN2340	Mobile Android App Development	3	0	0	3	3	20	15	30	✓			
2	MCAN2341	Mobile Android App Development Lab	0	0	2	1	1	35						✓
3		Program Elective (PE)	3	0	0	3	3	20	30	50	✓			
4	MCAN2330	Design & Analysis of Algorithm	3	0	0	3	3	20	30	50	✓			
5	MCAN2420	Web Development using Python	3	0	0	3	3	20	30	50	✓			
6	SLMC5013	Campus to Corporate	0	0	4	2	4	100						✓
7	MCAN2351	Technical Training-II	0	0	2	1	2	100						✓
8	MCAN6667	Minor Project	0	0	0	2	2	100						✓
9	MCAN2331	Design & Analysis of Algorithm Lab	0	0	2	1	2	100						✓
10	MCAN2333	Internship	0	0	0	4	0	100						✓
11	MCAN2421	Web Development using Python Lab	0	0	2	1	2	100						✓
		Total Credits (MCA)				24	25							
12		Specialize Core Theory-III	3	0	0	3		20	15	30	✓			
13		Specialize Core Lab-III	0	0	2	1		35						✓
		Total Credits (MCA Spl)				28	30							

Program Elective (PE) for III sem													Value added Course	
SI No	Course Code	Name of the Course						Assessment Pattern			EMP	EP		SKILL
			L	T	P	C		IA	MTE	ETE				
1	MCAN2360	Introduction to Artificial Intelligence	3	0	0	3		20	30	50	✓			

2	MCAN2370	Introduction to Internet of Things	3	0	0	3		20	30	50	✓			Microchip
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Semester IV													
SI No	Course Code	Name of the Course					Assessment Pattern			EMP	EP	SKILL	
			L	T	P	C	IA	MTE	ETE				
1		MooC Course	3	0	0	3		20	30	50	✓		
2	MCAN9900	Major Project	0	0	0	20		50		50			✓
		Total Credits (MCA)				23							
		Total Credits (MCA Spl)				23							

MCA Specializations Bucket

SI No	Course Code	Name of the Course	MCA IOP Bucket	SEM	Value added Course
2	MCAE1121	Cryptography and Network Security	CNCS		
3	MCAE1131	Cloud Computing	CC		
4	MCAE1141	Java Script	WDS		
5	MCAE2412	Machine learning	DA	II	Celebal Technologies
6	MCAE2322	Security Threats and Trends	CNCS		Celebal Technologies
7	MCAE1232	Cloud Organization & Architecture	CC		
8	MCAE1241	User Interface Design	WDS		
9	MCAE2351	Data analysis, handling & Visualization	DA	III	
10	MCAE2421	Ethical Hacking	CNCS		
11	MCAE2332	Fundamentals of Virtualization, Cloud Security & Management	CC		
12	MCAE2442	Advance Web Application Development	WDS		