

Domain wise List of Courses Identified:

Information and Communication Technology (ICT):	
MCA11	Object Oriented Programming
MCA12	Software Engineering
MCA L11	OOP Lab
MCAL16	Web Technology Lab
MCA L17	LINUX Lab
MCA21	Operating System
MCA22	Computer Networks
MCA23	Data Structures
MCAL22	Computer Networks Lab
MCAL23	Data Structures Lab
MCAL26	Python Programming Lab
MCA31	Core and Advanced Java
MCA32	Database Management System
MCAL31	Core and Advanced Java Lab
MCAL32	Database Management System Lab
MCAL36	Unified Modelling Language Lab
MCA41	Dataware housing and Mining & Business Intelligence
MCA42	Software Testing and Quality Assurance
MCA43	Design and Analysis of Algorithm
MCA44	User Experience Design
MCAL41	Dataware housing and Mining & Business Intelligence Lab
MCAL42	Software Testing and Quality Assurance Lab
MCAL43	Design and Analysis of Algorithm Lab
MCAL46	Mobile programming Lab
MCA501	Advanced web technology & Dot Net
MCA502	Wireless & Mobile Technology
MCA503	Soft Computing
MCA504	Distributed computing and Cloud Computing
L501 Lab I	AWT + Dot Net
L502 Lab II	Wireless & Mobile Technology + Mini project
Business Management (BM):	
MCA14	Principles of Management
MCA15	Banking and Finance
MCA24	Software Project Management
MCA34	Soft Skill Development
Mathematics (M):	
MCA13	Discrete Mathematics
MCA25	Probability and Statistics
MCA33	Operations Research

Professional Electives (PE):

- Student will select a track MCAEXXA or ELXXB or ELXXC or ELXXD or ELXXE or ELXXF
- Courses in a particular track are co-related
- Student can change the elective choice at the end of Semester III or before start of Semester IV

MCAE35[^] Elective-I	
MCAE35 A	Network Security
MCAE35 B	Artificial Intelligence
MCAE35 C	Management Information System
MCAE35 D	Computer Graphics and Image Processing
MCAE35 E	Service oriented architecture
MCAE45[^] Elective-II	
MCAE45 A	Information Security
MCAE45 B	Soft Computing
MCAE45 C	Enterprise Resource Planning
MCAE45 D	Multimedia
MCAE45 E	Semantic web
MCAE505[^] Elective-III	
MCA5051	Cyber Security
MCA5052	Multimedia Technology
MCA5053	Information System security and Audit
MCA5054	Bioinformatics
MCA5055	Software Quality Assurance
Project (PR):	
MCAP11	Mini project-I
MCAP21	Mini Project-II
MCAP31	Mini Project-III
MCAP41	Mini Project-IV
PR501	Mini Project
Summer/Internship Project (SP):	
MCASP2	Summer Project
MCASP4	Summer Course on Current Technology in Industry
MCASP6 .1	Internship – Project
MCASP6 .2	Internship –Seminar

FYMCA Scheme

<u>Scheme for M.C.A (SEM I to SEM VI)</u>						
SEM I						
Course Code	Course Name	Group	Teaching Scheme (Hrs/week)			Credits
MCA11	Object Oriented Programming	ICT	3	1		4
MCA12	Software Engineering	ICT	3	1		4
MCA13	Discrete Mathematics	M	3	1		4
MCA14	Principles of Management	BM	3	1	-	4
MCA15	Banking and Finance	BM	3	1	-	4
MCA L11	Object Oriented Programming Lab	ICT	-	-	4	2
MCAL16	Web Technology Lab	ICT	-	-	4	2
MCAL17	LINUX Lab	ICT	-	-	4	2
MCAP11	Mini project-I	PR			2	1
	Total		15	5	14	27
SEM II						
Course Code	Course Name	Group	Teaching Scheme (Hrs/week)			Credits
MCA21	Operating System	ICT	4	--		4
MCA22	Computer Networks	ICT	4	--		4
MCA23	Data Structures	ICT	3	1		4
MCA24	Software Project Management	BM	3	1		4
MCA25	Probability and Statistics	M	3	1	-	4
MCAL22	Computer Networks Lab	ICT			4	2
MCAL23	Data Structures Lab	ICT			4	2
MCAL26	Python Programming Lab	ICT	-	-	4	2
MCAP21	Mini Project-II	PR			2	1
	Total		17	3	14	27
MCASP2 Summer Project [to be evaluated in Sem III]		SP				

SYMCA Scheme

SEM III						
Course Code	Course Name	Group	Teaching Scheme (Hrs/week)			Credits
MCA31	Core and Advanced Java	ICT	4	-	-	4
MCA32	Database Management System	ICT	3	1	-	4
MCA33	Operations Research	M	3	1	-	4
MCA34	Soft Skill Development	BM	4	-	-	4
MCAE35 [^]	Elective-I MCAE35 A Network Security MCAE35 B Artificial Intelligence MCAE35 C Management Information System MCAE35 D Computer Graphics and Image Processing MCAE35 E Service Oriented Architecture	PE	3	-	-	3
MCAL31	Core and Advanced Java Lab	ICT	-	-	4	2
MCAL32	Database Management System lab	ICT			4	2
MCAL36	Unified Modeling Language Lab	ICT			4	2
MCAP31	Mini Project-III	PR			2	1
MCASP2	Summer Project	SP	-	-	-	2
	Total		17	2	14	28
SEM IV						
Course Code	Course Name	Group	Teaching Scheme (Hrs/week)			Credits
MCA41	Data warehousing and Mining & Business Intelligence	ICT	3	1		4
MCA42	Software Testing and Quality Assurance	ICT	3	1		4
MCA43	Design and Analysis of Algorithm	ICT	3	1	-	4
MCA44	User Experience Design	ICT	3	1	-	4
MCAE45 [^]	Elective-II MCAE45 A Information Security MCAE45 B Soft Computing MCAE45 C Enterprise Resource Planning MCAE45 D Multimedia MCAE45 E Semantic Web	PE	3	-	-	3
MCAL41	Data warehousing and Mining & Business Intelligence Lab	ICT	-	-	4	2
MCAL42	Software Testing and Quality Assurance	ICT	-	-	2	1
MCAL43	Design and Analysis of Algorithm	ICT	-	-	2	1
MCAL46	Mobile programming Lab	ICT	-	-	4	2
MCAP41	Mini Project-IV	PR	-	-	2	1
	Total		15	4	14	26
	MCASP2 Summer Project [to be evaluated in Sem IV]	SP				

TYMCA Scheme

SEM V						
Course Code	Course Name	GR	(L)	(T)	(P)	C
MCA501	Advanced web technology & Dot Net	ICT	4	--	--	4
MCA502	Wireless & Mobile Technology	ICT	4	--	--	4
MCA503	Soft Computing	ICT	4	--	--	4
MCA504	Distributed computing and Cloud Computing	ICT	4	--	--	4
Elective II (SELECT ANY ONE)						
MCA5051	Cyber Security	ICT	4	--	--	4
MCA5052	Multimedia Technology	ICT	4	--	--	4
MCA5053	Information System security and Audit	ICT	4	--	--	4
MCA5054	Bio-informatics	ICT	4	--	--	4
MCA5055	Software Quality Assurance	ICT	4	--	--	4
L501	Lab I-AWT + Dot Net	ICT	--	--	6	3
L502	Lab II- Wireless & Mobile Technology + Mini project	ICT	--	--	6	3
PR501	Summer Project	SP	--	--	--	2
		Total	20	-	12	28
SEM VI						
Course Code	Course Name	GR	(L)	(T)	(P)	C
MCA SP 6.1	INTERNSHIP – Project	SP	--	--	30	15
MCA SP 6.2	Seminar Paper	SP	--	--	--	01
					Total	16

Credits domain wise

S.N.	Domain	Sem I	Sem II	Sem III	Sem IV	Sem V	Sem VI	Total
1	Information Communication Technology	14	18	14	22	22	-	90
2	Business Management	8	4	4	-	-	-	16
3	Mathematics	4	4	4	-	-	-	12
4	Project	1	1	3	1	2	16	24
5	Professional Elective	-	-	3	3	4	-	10
		27	27	28	26	28	16	152

Typical credit and load structure for MCA Programme:

Semester	Units/Week			Total Units/ Week	Total Credits
	L	T	P		
I	15	5	14	34	27
II	17	3	14	34	27
III	17	2	14	33	28
IV	15	4	14	33	26
V	20	-	12	32	28
VI	-	-	-	-	16
Total Credits					152

Odd Semester

Semester	Units/Week			Total Units/ Week	Total
	L	T	P		
I	15	5	14	34	15+5+42=62
III	17	2	14	32	17+2+42= 61
V	20	-	12	32	20+0+36=56
Total					179

Even Semester

Semester	Units/Week			Total Units/ Week	Total
	L	T	P		
II	17	3	14	34	17+3+42=62
IV	15	2	14	31	15+2+42=59
Total					121