

**MASTER OF COMPUTER APPLICATION ( 3 Yr) Course Code – 20304**  
**MASTER OF COMPUTER APPLICATION ( 2 Yr) Course Code – 20704**  
**MASTER OF SCIENCE IN COMPUTER SCIENCE Course Code – 20312**  
**MASTER OF SCIENCE IN INFORMATION TECHNOLOGY**

Course Code – 20313

**MASTER OF SCIENCE IN INFORMATION TECHNOLOGY &  
MANAGEMENT Course Code – 20314**

**UNDER CBCS (With effect from 2014)**

**WE DO NOT PROVIDE ANY PLACEMENT ASSISTANCE. STUDENTS GET EMPLOYED THROUGH SELF INITIATIVES.**

**Course Structure (Course is under revision)**

**EFFECTIVE FROM 2014 – 15 ACADEMIC SESSIONS IN REGULAR MODE**

**FIRST SEMESTER ( 9 Papers )**

PAPER	SUBJECT	FULL MARK	L – T – P	CREDIT
CS 1.1	Introduction to Information Technology	100	3-1-0	4
CS 1.2	Programming Logic & C Programming	100	3-1-0	4
CS 1.3	Discrete Mathematics	100	3-1-0	4
CS 1.4	Probability & Statistics	100	3-1-0	4
<i>Any two from followings ( CS 1.5 &amp; CS 1.6 )</i>				
1.	Accounting & Financial Management	100	3-1-0	4
2.	Principles of Management	100	3-1-0	4
3.	Business & Communicative English	100	3-1-0	4
4.	Editing Skills	100	3-1-0	4
CS 1.7	Practical - I	50	0-0-6	4
CS 1.8	Practical - II	50	0-0-6	4
CS 1.9	Practical - III	50	0-0-6	4
<b>TOTAL 750</b>				<b>36</b>

**SECOND SEMESTER ( 9 Papers )**

PAPER	SUBJECT	FULL MARK	L – T – P	CREDIT
CS 2.1	DATA STRUCTURE	100	3-1-0	4
CS 2.2	Digital circuit & Logic Design	100	3-1-0	4
CS 2.3	Object Oriented Programming using C++	100	3-1-0	4
CS 2.4	Quantitative Techniques	100	3-1-0	4
CS 2.5	Numerical Analysis	100	3-1-0	4
<i>Any One from followings (CS 2.6)</i>				
1.	Organisational Behaviour	100	3-1-0	4
2.	Business Economics	100	3-1-0	4
3.	Marketing Management	100	3-1-0	4
CS 2.7	Practical - I	50	0-0-6	4
CS 2.8	Practical - II	50	0-0-6	4
CS 2.9	Practical - III	50	0-0-6	4
<b>TOTAL 750</b>				<b>36</b>

**THIRD SEMESTER ( 9 Papers )**

PAPER	SUBJECT	FULL MARK	L – T – P	CREDIT
CS 3.1	Operating System	100	3-1-0	4
CS 3.2	Data Communication & Computer Networks	100	3-1-0	4
CS 3.3	Microprocessor & Assembly Language Programming	100	3-1-0	4
CS 3.4	Database Management System	100	3-1-0	4
CS 3.5	Computer Architecture	100	3-1-0	4
CS 3.6	Theory of Computation	100	3-1-0	4
CS 3.7	Practical - I	50	0-0-6	4
CS 3.8	Practical - II	50	0-0-6	4
CS 3.9	Practical - III	50	0-0-6	4
<b>TOTAL 750</b>				<b>36</b>

**FOURTH SEMESTER ( 9 Papers )**

PAPER	SUBJECT	FULL MARK	L – T – P	CREDIT
CS 4.1	Software Engineering	100	3-1-0	4
CS 4.2	Artificial Intelligence	100	3-1-0	4
CS 4.3	Internet & Java Programming	100	3-1-0	4
CS 4.4	Computer Graphics	100	3-1-0	4
CS 4.5	Combinatorics & Graph Theory			
CS 4.6	Advance Computer Network	100	3-1-0	4
CS 4.7	Practical - I	50	0-0-6	4
CS 4.8	Practical - II	50	0-0-6	4
CS 4.9	Practical - III	50	0-0-6	4
<b>TOTAL 750</b>				<b>36</b>

**FIFTH SEMESTER (9 Papers)**

PAPER	SUBJECT	FULL MARK	L – T – P	CREDIT
CS 5.1	Data mining & Data Warehousing	100	3-1-0	4
CS 5.2	Analysis & Design of Algorithms	100	3-1-0	4
CS 5.3	Compiler Design	100	3-1-0	4
For MCA Students ( CS 5.4, CS 5.5, CS 5.6 ) ( Any Three from the followings )				
1.	Distributed Systems	100	3-1-0	4
2.	Parallel Computing	100	3-1-0	4
3.	Digital Image Processing	100	3-1-0	4
4.	Computer Network Security	100	3-1-0	4
5.	Web Engineering	100	3-1-0	4
For M.Sc. ( Computer Science ) Students ( CS 5.4, CS 5.5, CS 5.6 ) ( Any Three from the followings )				
1.	Realtime Systems	100	3-1-0	4
2.	Soft Computing	100	3-1-0	4
3.	Client Server Computing	100	3-1-0	4
4.	Computer Vision	100	3-1-0	4
5.	Bioinformatics	100	3-1-0	4
For MIT / M.Sc. ( IT / ITM ) Students ( CS 5.4, CS 5.5, CS 5.6 ) ( Any Three from the followings )				
1.	Computer Network Security	100	3-1-0	4
2.	Embedded System	100	3-1-0	4
3.	Cloud Computing	100	3-1-0	4
4.	Mobile Computing	100	3-1-0	4
5.	Pattern Recognition	100	3-1-0	4
CS 5.7	Practical - I	50	0-0-6	4
CS 5.8	Practical - II	50	0-0-6	4
CS 5.9	Practical - III	50	0-0-6	4
CS 5.10	Pre Placement Techniques ( Non Credit )			
<b>TOTAL 750</b>				<b>36</b>

**SIXTH SEMESTER (PROJECT WORK FOR 16 WEEKS\*\* )**

PAPER	SUBJECT	FULL MARK	L – T – P	CREDIT
CS 6.1	Grand Viva	100		4
	Dissertation / Project & Presentation	300		8
<b>TOTAL</b>		<b>400</b>		<b>12</b>

\*\* There will be a 16 weeks project work to be undertaken by the students in any Industry / Institution. At the end of the project there will an evaluation of the project for 12 credits by an External & Internal Examiner .

**Those who have not passed Mathematics / Statistics at +2 Level have to pass a Bridge Course consisting of two +2 Level Mathematics Course ( Non Credit ).**

**BRIDGE COURSE**

<b>PAPER</b>	<b>SUBJECT</b>	<b>FULL MARK</b>	<b>L – T – P</b>	<b>CREDIT</b>
CS B.1	Mathematical Foundation for Computer Science - I	100	40 Hours	
CS B.2	Mathematical Foundation for Computer Science - II	100	40 Hours	

**The examination for the above Non Credit papers shall be conducted during first and / or second semester of MCA Programme.**