

**STUDY & EVALUATION SCHEME**  
**MCA (MASTER OF COMPUTER APPLICATION)**  
**I YEAR: I SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	MHU1003	Professional Communication	3	0	0	40	60	100	3
2	MMA1010	Discrete Mathematical Structures	3	2	0	40	60	100	4
3	MEC1013	Digital Electronics and Computer Organization	3	2	0	40	60	100	4
4	MCS1007	Database Management Systems	3	2	0	40	60	100	4
5	MCS1008	Programming in C	3	2	0	40	60	100	4
<b>PRACTICAL/ TRAINING/PROJECT</b>									
6	MHU1501	English Language Lab	0	0	2	80	20	100	1
7	MCS1507	Database Management Systems Lab	0	0	2	80	20	100	1
8	MCS1508	Programming in C Lab	0	0	2	80	20	100	1
<b>TOTAL</b>			<b>15</b>	<b>8</b>	<b>6</b>	<b>440</b>	<b>360</b>	<b>800</b>	<b>22</b>

L - Lecture

T - Tutorial

P - Practical

CIE - Continuous Internal Evaluation

ESE-End Semester Exam

C - Credit

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**I YEAR: II SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	MCS2016	Theory of Computer Science	3	2	0	40	60	100	4
2	MCS2013	Operating System	3	2	0	40	60	100	4
3	MCS2014	Object Oriented Systems	3	2	0	40	60	100	4
4	MCS2011	Software Engineering	3	1	0	40	60	100	3
5	MCS2015	Data Structures and Algorithms	3	2	0	40	60	100	4
<b>PRACTICAL/ TRAINING/PROJECT</b>									
6	MCS2506	Operating System Lab	0	0	2	80	20	100	1
7	MCS2507	Data Structures and Algorithms Lab	0	0	2	80	20	100	1
8	MCS2508	Java Lab	0	0	2	80	20	100	1
9	MSS2501	Soft Skills	0	0	2	80	20	100	1
10	MAP2501	Aptitude & Reasoning and Online Test	0	0	2	100	-	100	1
<b>TOTAL</b>			<b>15</b>	<b>9</b>	<b>10</b>	<b>640</b>	<b>360</b>	<b>1000</b>	<b>24</b>

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**II YEAR: III SEMESTER**

S. NO.	SUBJECT CODE	SUBJECT	L	T	P	CIE	ESE	TOTAL	C
<b>THEORY</b>									
1	MCS3014	Artificial Intelligence	3	2	0	40	60	100	4
2	MCS3013	Computer Networks	3	2	0	40	60	100	4
3	MCS3015	Programming using Python	3	2	0	40	60	100	4
4		Elective I	3	0	0	40	60	100	3
5		Elective II	3	1	0	40	60	100	3
<b>PRACTICAL/ TRAINING/PROJECT</b>									
6	MCS3510	Programming using Python Lab	0	0	2	80	20	100	1
7	MCS3511	Computer Networks Lab	0	0	2	80	20	100	1
8	MCS3512	Minor Project	0	0	2	100	-	100	1
9	MCS3514	Summer Training and Seminar	0	0	2	100	-	100	1
10	MAP3501	Aptitude & Reasoning and Online Test	0	0	2	100	-	100	1
<b>TOTAL</b>			<b>15</b>	<b>7</b>	<b>10</b>	<b>660</b>	<b>340</b>	<b>1000</b>	<b>23</b>

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**STUDY & EVALUATION SCHEME**  
**MCA (MASTER OF COMPUTER APPLICATION)**  
**II YEAR: IV SEMESTER**

<b>S. NO.</b>	<b>SUBJECT CODE</b>	<b>SUBJECT</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CIE</b>	<b>ESE</b>	<b>TOTAL</b>	<b>C</b>
<b>PRACTICAL/ TRAINING/PROJECT</b>									
1	MCS4508	Major Project	0	0	0	100	-	100	12
<b>TOTAL</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>12</b>

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**LIST OF ELECTIVES**

<b>S. NO.</b>	<b>SUBJECT CODE</b>	<b>SUBJECT</b>	<b>SEMESTER</b>
<b>Elective - I</b>			
1	MCS3117	Mobile Computing	III Semester
2	MCS3118	Big Data	
3	MCS3119	Cloud Computing	
4	MCS3120	Machine Learning and Pattern Recognition	
5	MCS3121	Data Mining and Data Analysis	
<b>Elective - II</b>			
1	MMA3204	Computer Based Optimization Techniques	III Semester
2	MCS3213	Digital Image Processing	
3	MCS3214	Soft Computing	
4	MCS3215	Cryptography and Network Security	
5	MCS3216	Web Technology	