MASTER OF SCIENCE IN INFORMATION TECHNOLOGY
(A Choice Based Credit System Effective from 2016-17)

1. Duration of the Course
The Master of Science in Information Technology programme will be of four semesters duration under Choice based Credit system which will be conducted in two years. Each semester will be of approximately 5 months (minimum 90 working days in a semester) duration.

2. Eligibility:
Candidates seeking admission to the first semester of M.Sc.(CBCS) Information Technology must have a B.Sc. or equivalent/B.C.A degree (10+2+3 scheme) with minimum 48% marks and also must have studied Mathematics in their degree programme from a recognized university.

3. **Admissions**:
Admissions to the first year of M.Sc.(IT) will be made as per admission rules for M.Sc.(CBCS)

4. Medium of Instruction
The medium of instruction and examination shall be English.
5. **No. of Seats:** As given in the Information bulletin

6. Curriculum
6.1 M.Sc.(IT) programme has a two year , four semester prescribed course structure which in general terms is known as curriculum. It prescribes courses to be studied in each semester as given below

6.2M.Sc.(IT) programme shall have a curriculum and course contents (syllabi) for the courses recommended by the committee courses in Informatics and Computational Sciences and approved by the academic council of the university.

6.3 The programme shall follow Choice Based Credit System(CBCS) and will be governed by the Common Rules and Regulations of Masters programme under CBCS approved by the Academic Council of the University.

7. Courses of Study and Examination (2016-17)

Semester – I

| course | Paper Name | L-T-P | No.of credits | Max. Marks | | Total |
				University Exam.	Internal Assessment	
1	2		3	4	5	6
M1MIT01-CT01	Computer Architecture	3-1-0	4	80	20	100
M1MIT02-CT02	Introduction to Programming	3-0-2	4	80	20	100
M1MIT03-CT03	Data Structure	3-1-0	4	80	20	100
M1MIT04-CT04	Discrete Mathematics	3-1-0	4	80	20	100
M1MIT05-CP01	Practical-I Data Structure Programming	0-0-8	4	80	20	100
M1MIT06-CP02	Practical-II Web Development Using HTML & CSS	0-0-8	4	80	20	100

M1MIT07-SP01	Communication & Presentation Skill	0-0-4	2AC	80	20	100
	TOTAL		24(26)			

Courses of Study and Examination (2016-17)

Semester – II

course	Paper Name	L-T-P	No.of credits	Max. Marks		Total
				University Exam.	Internal Assessment	
1	2		3	4	5	6
M2MIT01-CT05	Database Systems	3-0-2	4	80	20	100
M2MIT02-CT06	Operating System	3-0-2	4	80	20	100
M2MIT03-CT07	Algorithms	3-0-2	4	80	20	100
M2MIT04-CT08	Object Oriented Programming using C++	3-0-2	4	80	20	100
M2MIT05-CP03	Practical-I: Algorithm Implementations	0-0-8	4	80	20	100
M2MIT06-EP01X	Practical-II: **Elective Lab-I : Web Application Development** A. Web Development using Dot NET B. Web Development using PHP& MYSQL	0-0-8	4	80	20	100
M2MIT07-EP02X	Practical-III:Minor Project or Elective skill Enhancement Course- I	0-0-6	3	80	20	100
	Total		27			

Courses of Study and Examination (2016-17)

Semester – III

course	Paper Name	L-T-P	No.of credits	Max. Marks		Total
				University Exam.	Internal Assessment	
1	2		3	4	5	6
M3MIT01-CT09	Computer Networks	3-1-0	4	80	20	100
M3MIT02-CT10	Java Programming	3-0-2	4	80	20	100
M3MIT03-ET01X	Elective -1 A.Introduction to Data Science	3-0-2	4	80	20	100

	B. Computer Graphics					
M3MIT04-ET02X	Elective-2 A. Software Engineering B. Image Processing	3-0-2	4	80	20	100
M3MIT05-EP03X	Practical-I: **Elective Lab-II** A. Android Programming B. Microprocessor & Micro-controller Programming	0-0-8	4	80	20	100
M3MIT06-EP04X	Practical-II: **Elective Lab-III** A. Big Data Analytics B. Cloud Computing C. Web Application Project	0-0-8	4	80	20	100
M3MIT07-EP05X	Practical-III: Minor Project OR Elective Skill Enhancement Course- II	0-0-6	3	80	20	100
M3MIT08-EP06X	Elective Skill Enhancement Course- III	0-0-4	2AC	80	20	100
	Total		27(29)			

Courses of Study and Examination (2016-17)

Semester – IV

course	Paper Name	L-T-P	No.of credits	Max. Marks		Total
				University Exam.	Internal Assessment	
1	2		3	4	5	6
M4MIT01-PW01	Project Work	0-0-36	18	80	20	100
Total Credits: Final Semester Project External Examination will be conducted at the University Department/Computer Centre by a Committee						

Elective Technology Courses

Elective Lab-I :Web Application Development (Semester II)
A. Web Development using Dot NET
B. Web Development using PHP& MYSQL

Elective Lab-II(Semester III)
A. Android Programming
B. Microprocessor & Micro-controller Programming

Elective Lab-III(Semester III)
A.   Big Data Analytics
B.   Cloud Computing
C.   Web Application Project*
(Only working projects tested and Accepted for implementation by hosting the application on web sites will be acceptable)

Minor Project, Elective Skill Enhancement Course
Note : Since this list is common for Semester II and III, it should be noted that a course cannot be repeated from semester to another. The student will have to opt for different courses in different semesters.

A.   Minor Project
B.   Communication and Presentation Skill
C.   Scientific Writing Skill
D.   Statistical Analysis of data
E.   Numerical Analysis Techniques using MATLAB
F.   Campus Network Configuration & Management
G.   Big Data Analytics
H.   Cloud Computing
I.   Data Mining
J.   Financial and Accounting Tools
K.   Computer Animation

Extra Credit Courses

A.   Summer Project
B.   Internship
C.   IT Industry Certification Courses

Course Code

Course codes are written in the following format

Mastersprogramme (M)+Semester (1,2,34)+MIT(Information Technology Discipline)+Serial Number of Course in the Semester(01,02,03 etc)+ hyphen("-") +Course type [Core Theory (CT), Core Practical(CP), Discipline Specific Theory (ET), Discipline Specific Practical (EP), Skill Practical(SP)]+Group Code (A,B,C etc)

For example the Course code M1MIT01-CT01 should read as Master Programme First Semester Information Technology First Course-Core Theory Course-01
In the Course code M3MIT06- EP01A should read as Master Programme Third Semester Information Technology Sixth Course-Discipline Specific Elective Practical Course-01 Group-A