Scheme of Teaching and Examination for
Master of Engineering (Computer Science and Engineering)
Two years Full time Course

Semester-I								
Subject Code	**Subject**	**Hours per week**			**Scheme of Examination**			
		L	T	P	**Theory (Hrs)**	**Credits**		
						Theory	**IA**	**Pract**	**Total**
MCSE 1.1	Advance Data Structure and Algorithm	4	-	-	3	4	2	-	6
MCSE 1.2	Distributed Operating System	4	-	-	3	4	2	-	6
MCSE 1.3	Advances in Computer Architecture	4	-	-	3	4	2	-	6
MCSE 1.4	Elective-I	4	-	-	3	4	2	-	6
MCSE 1.5	Elective –II	4	-	-	3	4	2	-	6
MCSE 1.6	Programming Lab-I	---	--	8	--	-	2	4	6
	Total	**20**	**-**	**8**		**20**	**12**	**4**	**36**

Semester-II								
Subject Code	**Subject**	**Hours per week**			**Scheme of Examination**			
		L	T	P	**Theory (Hrs)**	**Credits**		
						Theory	**IA**	**Pract**	**Total**
MCSE 2.1	Advanced Concepts in Database System	4	-	-	3	4	2	-	6
MCSE 2.2	Design and Analysis of Computer Networks	4	-	-	3	4	2	-	6
MCSE 2.3	Advanced Software Engineering	4	-	-	3	4	2	-	6
MCSE 2.4	Elective-III	4	-	-	3	4	2	-	6
MCSE 2.5	Elective –IV	4	-	-	3	4	2	-	6
MCSE 2.6	Programming Lab -II	---	--	8	-	-	2	4	6
	Total	**20**	**-**	**8**		**20**	**12**	**4**	**36**

Semester-III								
Subject Code	**Subject**	**Hours per week**			**Scheme of Examination**			
		L	T	P	**Theory (Hrs)**	**Credits**		
						Theory	**IA**	**Oral**	**Total**
MCSE 3.1	Advanced Compiler Design	4	-		3	4	2	-	6
MCSE 3.2	Elective-V	4	-		3	4	2	-	6
MCSE 3.3	Project	---	---	14	---	---	4	4	8
MCSE 3.4	Seminar	---	---	6	---	---	2	2	4
	Total	**8**	**-**	**20**		**8**	**10**	**6**	**24**

Semester-IV									
Subject Code	**Subject**	**Hours per week**			**Scheme of Examination**				
		L	T	P	**Theory (Hrs)**	**Credits**			
						Theory	**IA**	**Oral***	**Total**
MCSE 4.1	Dissertation	--	----	28	--	--	8	12	20
	Total			**28**		**---**	**8**	**12**	**20**

Grand Total of all four semesters	**48**	**--**	**64**		**48**	**42**	**26**	**116**

\# All theory papers of 100 marks

Note:- * Examination panel shall be constituted with the Head of Computer Engineering Department or his nominee (if Head is the guide or if the Head cannot be present) as a chairman, , the guide and another examiner from outside the University , wherever possible.

List of Elective Subjects:

ELECTIVE –I (MCSE 1.4)
 1. Machine Learning
 2. Stochastic modeling and Analysis
 3. Advanced Digital Signal Processing
 4. Software Testing and Quality Assurance
 5. Graph Theory

ELECTIVE-III (MCSE 2.4)

 1. Pattern Recognition
 2. Advanced Genetic Algorithm
 3. Web Technology and E-commerce
 4. Embedded System
 5. Functional Programming

 ELECTIVE –V (MCSE 3.2)

 1. Fuzzy Logic Design
 2. Cryptography and Network Security
 3. Object Oriented Modeling and Design
 4. Robotics
 5. Multi Core Architecture

ELECTIVE-II (MCSE 1.5)
 1. Advanced Computer Graphics
 2. Storage Area Network
 3Parallel Computing
 4. Algorithmic approach to Bio-informatics
 5. Data Mining

ELECTIVE –IV (MCSE 2.5)

 1. Image Processing
 2. Mobile Computing
 3. Grid and Cluster Computing
 4.Real Time System
 5. Information Storage and Retrieval