

APPENDIX  
**UNIVERSITY OF MADRAS**  
**M.Sc. DEGREE COURSE IN COMPUTER SCIENCE**  
**REVISED REGULATIONS**  
 Choice Based Credit System  
 (Effective from the academic year 2015-2016)

1. Eligibility for Admission

Candidates with B.Sc. degree in Computer Science or Computer Science & Technology or B.C.A. degree of this University or any other degree accepted as equivalent thereto by the Syndicate.

5. Course of Study and scheme of examinations:  
 List of courses are given below:

First Semester

Course components	Name of Course	Credits	Exam. Durati	Max. Marks	
				IA	UE
Core -1	Design and Analysis of Algorithms	4	3	25	75
Core -2	Advanced Java Programming	4	3	25	75
Core -3	Systems Software	4	3	25	75
Core – 4	Practical – I: Algorithms Lab	2	3	40	60
Core – 5	Practical – II: Advanced Java Lab.	2	3	40	60
Extra Disciplinary Elective -1	Theoretical Foundations of Computer Science	4	3	25	75
SoftSkill-1		2	3		

Second Semester

Course components	Name of Course	Credits	Exam. Durati	Max. Marks	
				CIA	UE
Core-6	Computer Networks	4	3	25	75
Core-7	Digital Image Processing	4	3	25	75
Core-8	Practical – III: RDBMS Lab.	2	3	40	60
Elective I	Elective – I	3	3	25	75
Core-9	Practical – IV: Image Processing using Java Lab	2	3	40	60
Extra Disciplinary Elective -2	Object Oriented Analysis and Design	3	3	25	75
SoftSkill-2		2	3	40	60
SoftSkill-3		2	3	40	60
Internship	4 to 6 weeks of Internship during summer vacation of I Year				

### Third Semester

Course components	Name of Course	Credits	Exam. Duration	Max. Marks	
				CIA	UE
Core-10	Principles of Compiler Design	4	3	25	75
Core-11	Information Security	4	3	25	75
Core - 12	Artificial Intelligence	4	3	25	75
Elective	Elective –II	4	3	25	75
Elective	Elective – III	4	3	25	75
Core-13	Practical – V: Mini Project	2	3	40	60
Soft Skill-4		2	3	40	60
Internship	During summer vacation 4 to 6 weeks of I Year	2			100

### Fourth Semester

Course components	Name of Course	Credits	Exam. Duration	Max. Marks	
				CIA	UE
Core-14	Project & Viva-Voce	20	-	20	60+ 20

Elective - I

Mobile Computing OR Computer Simulation and Modeling OR Computer Graphics

Elective - II

Big data Analytics OR Cryptography OR Distributed Database Systems

Elective - III

Multimedia Systems OR E-Commerce OR Cloud Computing