



**SRM**  
INSTITUTE OF SCIENCE & TECHNOLOGY  
*(Deemed to be University u/s 3 of UGC Act, 1956)*

## **MASTER OF COMPUTER APPLICATIONS**

### **REGULATIONS - 2018**

**(For Regular and Lateral entry students admitted from the academic  
year 2018-2019 onwards)**

### **UNDER CHOICE BASED CREDIT SYSTEM**

**FACULTY OF SCIENCE AND HUMANITIES  
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY  
SRM Nagar, Kattankulathur – 603 203**

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**(For Regular and Lateral entry students admitted from the academic year  
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**R.1.0 ADMISSION**

- R.1.1 The number of seats in M.C.A degree programmes for which admission is to be made in the Faculty of Science and Humanities will be decided by the Board of Management of SRM Institute of Science and Technology.
- R.1.2 The minimum qualification for admission to M.C.A (Regular) degree programme shall be as mentioned in **R1.8** & M.C.A (Lateral Entry) degree programme shall be as mentioned in **R1.9** and as recognized by SRMIST.
- R.1.3 Notwithstanding the above, the actual admissions will be based on the rules and regulations of the UGC/AICTE/Competent authorities.
- R.1.4 Candidates have to fulfill the medical standards required for admission as set out by the Admission Committee.
- R.1.5 The selected candidate will be admitted to the M.C.A degree programme after he/she pays the prescribed fees.
- R.1.6 In the matter of admission to the M.C.A degree programme, the decision of the Admission Committee is final.
- R.1.7 If at any time after admission, it is found that a candidate has not fulfilled all the requirements stipulated in the offer of admission, the Director (F S&H) may revoke the admission and report the matter to the Vice Chancellor.

**R1.8 ELIGIBILITY FOR REGULAR PROGRAMME (3 Years Duration)**

The candidates seeking admission to the MCA Degree programme shall be required to have passed:

- a. B.C.A. / B.E.S / B.Sc.(Computer Science) / Mathematics / Physics / Statistics / Applied Sciences  
OR
- b. B.Com/ Bachelor of Bank Management/ B.B.A./ B.L.M./ B.A.(Corporate Secretary ship / B.A.(Economics) / any other Bachelor's Degree in any discipline with Business Mathematics and Statistics or Mathematics / Statistics in Main / Allied level  
OR
- c. B. Sc. Chemistry with Mathematics and Physics as allied subjects  
OR
- d. B. E. /B. Tech  
OR

- e. A Bachelor's Degree in any discipline with Mathematics as one of the subjects at the Higher Secondary level (i.e. in +2 level of the 10+2 pattern)

### **R1.9 ELIGIBILITY FOR LATERAL ENTRY PROGRAMME (2 Years Duration)**

- a) A pass with minimum aggregate of 55% in B.C.A / B.Sc. in Computer Science / B.Sc. in Information Technology.
- b) Third semester curriculum as applicable to the existing 3 year MCA program shall be followed in respect of lateral entry students.

### **R2.0 DURATION AND STRUCTURE OF THE PROGRAMME**

- R2.1 The programme is organized on semester basis with a total of six semesters.
- R2.2 A candidate shall be required to complete the course of study and qualify for the MCA Degree programme within FIVE years (10 consecutive semesters) from the date of admission to the first semester of the Degree programme. In the case of Lateral Entry, candidate shall be required to complete the course of study and qualify for this degree programme within FOUR years (8 consecutive semesters) from the date of admission to the third semester.
- R2.3 The curriculum of the MCA programme shall be so designed that the minimum prescribed credits required for the award of the Degree shall be **120 credits**. **In the case of Lateral Entry**, the minimum prescribed credits required for the award of the Degree shall be **80 credits**.
- R2.4 The electives chosen by the students from the curriculum shall be offered, provided that a minimum number of students, to be fixed by the department concerned registered for the same.

### **R3.0 PROJECT WORK**

- R3.1 Project work shall be carried out under the supervision of a qualified teacher in the concerned department.
- R3.2 The project work will be allotted at the end of fifth semester.
- R3.3 The Project Report prepared according to the approved guidelines and duly signed by the supervisor(s) and the Head of the Department shall be submitted to the Head of the Institution.
- R3.4 The deadline for submission of final project report is 30 calendar days from the last working day of the semester in which project is done.
- R3.5 If a candidate fails to submit the project report on or before the specified deadline, he / she is deemed to have failed in the project work and shall submit the same in a subsequent semester.

#### **R4.0 FACULTY ADVISER**

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department will attach a certain number of students to a teacher of the Department, who shall function as Faculty Adviser for those students throughout their period of study. Such Faculty Adviser shall advise the students and monitor the courses taken by the students, check the attendance and progress of the students attached to him / her and counsel them periodically. If necessary, the faculty adviser may also discuss with or inform the parents about the progress of the students.

#### **R5.0 CLASS COMMITTEE**

R5.1 A class committee consists of teachers of the concerned class, student representatives and a chairperson who is not teaching the class. The functions of the class committee include the following:

- Solving problems experienced by students in the class room and in the laboratories.
- Clarifying the regulations of the degree programme and the details of rules therein.
- Informing the student representatives about the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- Informing the students representatives on the details of regulations regarding the weightage used for each assessment.
- Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- Identifying the weak students, if any requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

R5.2 The class committee shall be constituted on the first working day of any semester or earlier.

R5.3 At least two students' representatives (usually one boy and one girl) shall be included in the class committee.

R5.4 The Chairperson of the class committee may invite the faculty adviser(s) and the head of the department to the meeting of the class committee.

R5.5 The Head of the institution may participate in any class committee of the institution.

R5.6 The Chairperson is required to prepare the minutes of every meeting and submit the same to the Head of the institution within two days of the meeting and arrange to circulate among the concerned students and teachers. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the management by the Head of the institution.

R5.7 The first meeting of the class committee shall be held within two weeks from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the regulations. Two or three subsequent meetings may be held at suitable intervals. During these meetings the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the class students to improve the effectiveness of the teaching learning process.

## **R6.0 REGISTRATION AND ENROLLMENT**

The process of signing up for courses is called registering. Students are enrolled after they pay the prescribed fees. For a student to attend classes he has to complete both registration and enrollment. All students shall formally register for the courses every semester to undergo course work.

R6.1 Registration of any course will be controlled by the concerned Head of the department.

Except for the first semester, the registration for a semester will be done during a specified week before the end-semester examination of the previous semester.

For the first semester registration shall be completed within a week of commencement of classes. Late registration will be permitted with a fine, decided time to time, up to two weeks from the last date specified for registration.

R.6.2 The registration sheet contains the course number, course name, number of credits and category for each course taken in that semester. The student makes the choice of course (in case of elective courses) in consultation with his / her Faculty Adviser.

## **R7.0 REQUIRMENT FOR COMPLETION OF A SEMESTER**

R.7.1 **Attendance is the physical presence of the student in the class.** It is a well-observed fact that the students who score good grades are those who attend classes regularly. Therefore, the students must strive to attend all the classes without fail.

R.7.2 Every teaching staff member handling a class will take attendance till the last instruction day in the semester. The percentage of attendance, calculated up to this point, the breakups of marks to be awarded for attendance is given below:

Attendance percentage range	Marks to be awarded
0 – 74	0
75 – 80	3
81– 90	4
91 – 100	5

- R.7.3 A student must maintain an attendance record of at least 75% in all courses added together. Without the minimum attendance of 75%, students become ineligible to write the end semester examination.
- R.7.4 The students must strive to attend all the classes without fail. However, the minimum attendance requirement of 75% allows a student the facility to use the balance 25% to account for illnesses, permitted assignments such as job interviews, inter university sports meets, inter-collegiate/inter-university competitions, accidents, unforeseen emergencies etc. An attendance of 75% is considered to be the minimum required for a student to get just enough input on the course syllabus through class room contact hours to make him/ her eligible to appear in the end semester examination.
- R.7.5 **Condonation of Attendance:**  
In rare and genuine cases, a committee consisting of the Director and Head of the concerned Department will examine the case and recommend suitably to the Vice Chancellor, who may give condonation of attendance in deserving cases, but not more than 10%.
- R.7.6 The teacher shall announce the particulars of all students who have attendance less than 75% in the class. Copies of the same should also be sent to the Director (F S&H), and Head of the Department concerned. **The students who have less than 75% attendance will not be permitted to appear in end semester examination.**
- R7.7 Those students who have not deemed to have completed the course with reference to the conditions specified above (R.7.6) shall repeat all the courses of the semester concerned in the next academic year.

## R8.0 ASSESSMENT PROCEDURE

- R8.1 a) The complete academic performance of a student is evaluated by Internal and External Examiners.  
b) In the case of practical / project work where an External Examiner shall be nominated for evaluation/ viva voce.
- R8.2 The student's performance in each course, in general, is evaluated based on in-semester assessment and end semester examination.
- R.8.3 The in-semester assessment method is further detailed below:

### (a) Courses with only Theory component

Assessment Tool	Marks	Remarks
Cycle Test I	10	Duration- 2 periods
Cycle Test II	10	
Model Examination	20	Duration- 3 hours
Surprise Test	5	
Attendance	5	
<b>Total</b>	<b>50</b>	

### (b) Courses with only practical component

Assessment tool	Marks	Remarks
Total In-semester assessment	50	
End semester examination	50	Duration – 3 hours

### (c) Courses with Theory and practical component

#### In-Semester Assessment marks (50).

Assessment tool	Marks
Cycle Test – I	05
Cycle Test - II	05
Model Examination	10
Model Practical Examination	05
Attendance based on theory class	05
Total	30

## THE END SEMESTER EXAMINATION WILL BE CONDUCTED AS FOLLOWS:

End Semester Practical Examination (To be converted to 20)	:	50 marks
End Semester Theory examination (To be converted to 50)	:	100 marks

### R8.4 NON-MAJOR ELECTIVE COURSES

a) The complete academic performance of a student is evaluated both by internal and external Examiners.

b) The student's performance in each course, in general, is evaluated based on in-semester assessment and end semester examination. The assessment method is further detailed below:

i) The in-semester assessment method **For Theory courses** is detailed below:

<b>In-Semester Assessment : 50 Marks</b>		
<b>Assessment Tool</b>	<b>Marks</b>	<b>Remarks</b>
Cycle Test I	10	Duration- 2 periods
Cycle Test II	10	
Model Examination	20	Duration- 3 hours
Surprise Test	5	
Attendance	5	
<b>Total</b>	<b>50</b>	

ii) The in-semester assessment method For **Laboratory courses** is detailed below:

<b>In-Semester Assessment : 50 Marks</b>		
<b>Assessment tool</b>	<b>Marks</b>	<b>Remarks</b>
Observation Note Book	10	Assessment components: Every experiment will carry marks for observation, completion, results and prompt submission of record for each experiment.
Output Result in time	10	
Model Examination	20	
Regularity and Discipline	10	



<b>End-Semester Assessment: 50 Marks</b>		
<b>Assessment tool</b>	<b>Marks</b>	<b>Remarks</b>
Record Note Book Submission	10	The nature of the end semester examination shall be informed to the students at the commencement of the course. The end semester examination will be conducted only after the last working day of the semester. The student has to appear for the end semester examination and 'AB' grade will be awarded for non appearance.
Program Writing	10	
Debugging	15	
Result / Output	15	

### **R8.5 INTERNSHIP PROGRAM**

For the Internship Program, the total marks would be 100:

In-semester Evaluation- 50 Marks & End-semester Evaluation- 50 Marks

In-semester evaluation will be carried out in two reviews by a review committee constituted by the HOD and the corresponding marks assigned to these reviews are as follows:

#### **In-Semester Assessment: 50 Marks**

<b>Assessment Tool</b>	<b>Marks</b>
Review 1	10
Review 2	20
Internship Report Submission	20
<b>Total</b>	<b>50</b>

In addition to the internal evaluation, the candidates shall appear for an external evaluation of 50 marks.

#### **End-Semester Assessment: 50 Marks**

<b>Assessment Tool</b>	<b>Marks</b>
Report Evaluation	20
Presentation	15
Viva-Voce	15
<b>Total</b>	<b>50</b>

### **R8.6 MINI PROJECT AND PROJECT WORK**

For the Mini Project and Project work, the total marks will be 100 comprising of 50 marks for the internal assessment and 50 marks for the External Evaluation.

The internal marks will be awarded based on three reviews by a review committee constituted by the HOD and details of marks are as follows:

#### **In-Semester Assessment: 50 Marks**

<b>Assessment Tool</b>	<b>Marks</b>
Review 1 (Abstract)	10
Review 2	10
Review 3	20
Thesis submission	10
<b>Total</b>	<b>50</b>

#### **End-Semester Assessment: 50 Marks**

<b>Assessment Tool</b>	<b>Marks</b>
Report Evaluation	15
Presentation	15
Viva-Voce	20
<b>Total</b>	<b>50</b>

### **R9.0 REQUIREMENTS FOR APPEARING FOR SEMESTER EXAMINATIONS**

A candidate shall normally be permitted to appear for the end semester examination of any semester if he / she has satisfied the semester completion requirements (vide clause 7) and has registered for examination in all courses of that semester.

### **R10.0 EXAMINATIONS**

R10.1 Registration for End semester Examination is mandatory for all courses.

R10.2 The end semester examinations will ordinarily be conducted during October to December in the odd semester and during March to May in the even semester. For all theory courses, Question papers will be set by external or internal examiners and valued by one external and one internal examiner. If the difference is 0 to 10 marks, average mark shall be considered for final result. If the difference in the valuation is more than 10 marks, third valuation will be taken. In the case of third valuation, the average of the nearest two valuations shall be considered for final result.

R10.3 All practical examinations including project work, viva voce will be conducted by internal and / or external examiners appointed by the institution.

R10.4 The maximum marks for any course (theory or practical excluding project work) will be 100 comprising of 50 marks for internal assessment and 50 marks for the end semester examinations.

R10.5 For project work, the total marks will be 100 comprising of 50 for internal assessment, 15 marks for project evaluation, 15 marks for Presentation and 20 marks for the Viva-Voce examination. Project viva board constituted by Head of the Department will evaluate the dissertation and conduct viva-voce examination.

R10.6 **a) Pattern of Question Paper (Theory)**

The question paper for all theory courses consists of two parts namely PART-A and PART-B. PART-A consists of 8 questions out of which 5 questions to be answered, each question carries 5 marks. Part-B consists of 15 marks questions of either or pattern for each unit (5 Units).

**b) Pattern of Question Paper (Practical):**

**Time: 3 hours and Max Marks: 50 Marks.**

- i) The External Examiner will set a question paper after discussing with the Internal Examiner (Selective Subjects)
- ii) The External Examiner will conduct viva voce based on the record work submitted by the student.
- iii) Marks secured by the candidate will make the aggregate 100, while adding with continuous Internal Assessment 50 following R.11.2.4.

**R11.0 PASSING REQUIREMENTS**

R11.1 A candidate who secures not less than 50% of total marks prescribed for any course with a minimum of 50% of the marks prescribed for the end semester examination shall be declared to have passed in the examination for that course.

**R.11.2 Procedure in Event of Failure / Absent**

R.11.2.1 Students who have secured 'F'(Fail) / 'Ab' (Absent) grade in a particular course (Other than project work) can reappear when the end semester examination for that course is conducted during the subsequent semesters. He / She should continue to register and reappear for the examination till he/she secures a pass grade.

R.11.2.2 For the first three attempts the internal marks obtained by the student during the normal duration of the course will be considered and it will be combined with the marks obtained in the end semester examination for the award of the appropriate grade.

- R.11.2.3 However if a student obtains F' (Fail) / 'Ab' (Absent) grade in a course in the first three attempts, from the fourth attempt onwards full weightage (100%) shall be assigned to the marks scored in the end semester examination and the internal marks obtained during the normal duration of the course will be ignored.
- R.11.2.4 In the event of failure in project work, the student will re-register for project work and redo the project work in subsequent semester and resubmit the dissertation a fresh for final evaluation. The internal assessment marks will be freshly allotted- in this case.
- R.11.2.5 If a course has theory and practical components combined, then the student shall appear in the end-semester examination for both theory and practical components duly.
- R.11.2.6 A student who obtains F' (Fail) / 'Ab' (Absent) grade in a Purely internal assessment course will have to enroll and continue the course in the subsequent semesters till he/she secures a pass grade.
- R.11.2.7 All applicable fees charged for the purpose of examination will apply for re-appearance courses as well.

## **R12.0 COURSE WISE GRADING OF STUDENTS**

### **R.12.1 Letter Grades and Grade Points (GP)**

All assessment of a course will be done on absolute marks basis. However for the purpose of reporting the performance of a candidate, letter grades, each carrying certain points, will be awarded as recommended by UGC, are as follows:

<b>Letter Grade</b>	<b>Grade Points</b>	<b>Range of Marks</b>
O (Outstanding)	10	91-100
A+ (Excellent)	9	81-90
A (very good)	8	71-80
B+(Good)	7	61-70
B (Above Average)	6	56-60
C(Average)	5	50-55
F(Fail)	0	<50 Failure due to insufficient marks in the course.
Ab(Absent)	0	Failure due to non-appearance in examination

- R 12.2 A Student is considered to have successfully completed a course and earned the credits if he/she secured a letter grade other than F or Ab in that course.  
A letter grade F or Ab in any course implies a failure in that course.
- R 12.3 A course successfully completed cannot be repeated.

#### R 12.4. **Grade sheet**

The grade Sheet issued by the Controller of Examinations to each student, after the announcement of the results will contain the following:

- a) The credits for each course registered for that semester,
- b) The letter grade obtained in each course
- c) The total number of credits earned by the student up to the end of that semester in each of the course categories
- d) Semester Grade Point Average (SGPA) of the current semester
- e) The Cumulative Grade Point Average (CGPA) of all the courses taken from the I semester onwards for regular students and from III semester onwards for lateral entry students. For lateral entry students the grades awarded in the bridge courses shall also be taken into consideration.

#### R12.3. **Computation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)**

- (i) The SGPA will be calculated according to the formula

$$SGPA = \frac{\sum_1^n C_i X(GP)_i}{\sum_1^n C_i}$$

Where  $C_i$  = credit for the  $i^{\text{th}}$  course,  $(GP)_i$  = the grade point obtained for the  $i^{\text{th}}$  course (refer R.16.1) ,  $n$  = total number of courses and the sum is over all the courses taken in that semester, including those in which the student has secured F grades.

- (ii) For the cumulative grade point average (CGPA) following formula is used:

$$CGPA = \frac{\sum_1^r S_i X(SGPA)_i}{\sum_1^r S_i}$$

where  $S_i$  = Sum of credits in  $i^{\text{th}}$  semester,  $(SGPA)_i$  = Semester Grade Point Average earned in  $i^{\text{th}}$  semester and  $r$  = number of semesters and the sum is over all the semesters under consideration.

- (iii). The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

### R13.0 ELIGIBILITY FOR THE AWARD OF M.C.A DEGREE

A student shall be declared to be eligible for the award of the MCA Degree provided.

- a. The student has successfully completed the course requirements and has passed all the prescribed examinations in all the 6 semesters within a maximum period of FIVE years reckoned from the commencement of the first semester to which the candidate was admitted. In the case of Lateral Entry students (who are admitted directly in third semester), prescribed examinations in all the 4 semesters within a maximum period of FOUR years reckoned from the commencement of the third semester.
- b. No disciplinary action is pending against the student.

### R14.0 CLASSIFICATION OF THE DEGREE AWARDED

Class /Distinction will be awarded to the students after they successfully complete the MCA programme as per norms given in the following table:

Regular Students		
Category	CGPA (From I-VI semesters)	Class
Students who successfully complete the MCA programme within the time duration of 6 semesters.	$\geq 5$ & $< 5.5$	Third Class
	$\geq 5.5$ & $< 6$	Second Class
	$\geq 6$ & $< 8$	First Class
	$\geq 8$ ( without F or ab or temporary withdrawal in any semester)	First Class with Distinction
	$\geq 8$ ( with F or ab in any semester but obtained pass grade (O to C subsequently)	First Class
Students who cannot complete the MCA program in 6 semesters but complete it successfully within the time duration of 7 semesters.	$\geq 5$ & $< 5.5$	Third Class
	$\geq 5.5$ & $< 6$	Second Class
	$\geq 6$	First Class
Students who cannot complete the MCA in 7 semesters but complete it successfully within the time duration of 10 semesters.	$\geq 5$ & $< 5.5$	Third Class
	$\geq 5.5$	Second Class

<b>Lateral Entry Students</b>		
<b>Category</b>	<b>CGPA (From III-VI semesters)</b>	<b>Class</b>
Students who successfully complete the MCA programme within the time duration of 4 semesters.	$\geq 5$ & $< 5.5$	Third Class
	$\geq 5.5$ & $< 6$	Second Class
	$\geq 6$ & $< 8$	First Class
	$\geq 8$ ( without F or ab or temporary withdrawal in any semester)	First Class with Distinction
	$\geq 8$ ( with F or ab in any semester but obtained pass grade (O to C subsequently)	First Class
Students who cannot complete the MCA in 4 semesters but complete it successfully within the time duration of 5 semesters.	$\geq 5$ & $< 5.5$	Third Class
	$\geq 5.5$ & $< 6$	Second Class
	$\geq 6$	First Class
Students who cannot complete the MCA in 5 semesters but complete it successfully within the time duration of 8 semesters.	$\geq 5$ & $< 5.5$	Third Class
	$\geq 5.5$	Second Class

### **R15.0 TEMPORARY BREAK OF STUDY FROM A PROGRAMME**

R15.1 A candidate is not normally permitted to temporarily break study. However if a candidate intends to temporarily discontinue the programme in the middle for valid reasons (Such as accident or hospitalization due to prolonged ill health) for a maximum continuous period of two semesters or the aggregate of individual discontinuation not exceeding two semesters, he/she shall apply to the Head of the Institution in advance but not later than the last date of registering for the end semester examinations of the year in question. Such applications should be routed through the Head of the department and the Head of the institution stating the reason for break of study.

- R15.2 The Candidate who intends to rejoin the programme after the break shall submit rejoin application in the next academic year through the Head of the department and the Head of the institution.
- R15.3 The Candidate who rejoins after the break shall be governed by the rules and regulations in force at the time of rejoining.
- R15.4 The duration specified for passing all the courses for the purpose of classification vide Clause 14 shall not be increased by the period of such break of study permitted.
- R15.5 The total period for completion of the programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 2 irrespective of the period of break of study in order that he / she may be eligible for the award of the degree (vide clause 13).
- R15.6 If any student is detained for want of requisite attendance, progress and good conduct, the period spent in that semester shall not be considered as permitted 'Break of Study' and this clause is not applicable for the detention cases.

#### **R16.0 DISCIPLINE**

- R.16.1 Every student is required to maintain discipline and decorum behavior both inside and outside the SRMIST campus and not to indulge in any activity that will tend to bring down the prestige of the University.
- R.16.2 Any act of indiscipline of a student is first to be considered by the Discipline and Welfare Committee of the Department for necessary action. If the issue demands more serious consideration, the act of indiscipline will be reported to the Director (FS&H), and he will refer it to the Discipline and Welfare Committee of the University, constituted by the Vice Chancellor.
- R.16.3 The Committee will enquire into the charges and recommend suitable action if the charges are substantiated. The Director (FS&H) will take appropriate action on the recommendation of the Discipline and Welfare Committee.
- R.16.4 The Director (FS&H) may suspend a student pending inquiry depending upon the prima facie evidence.
- R.16.5 Appeal: The student may appeal to the Vice Chancellor whose decision will be final and binding.

#### **R17.0 REVISION OF REGULATIONS AND CURRICULUM**

The Academic Council of the SRMIST reserves the right to revise or change or amend the regulations, the scheme of examinations, the curriculum and the syllabi from time to time.