

**MOHANLAL SUKHADIA UNIVERSITY: UDAIPUR**

**MASTER OF COMPUTER APPLICATION PROGRAMME**

**(A Choice Based Credit System Effective from session 2022-23)**

Common Rules and Regulations applicable for the Masters Program in Computer Application from session **2022-23** in accordance with the Common rules and regulation for Masters Programme in Science under CBCS approved by the Academic council meeting on 13-6-2015

**1. Duration of the Program**

The Master of Computer Application program shall be of four semester's duration which will be conducted in two years. Each semester will be approximately 5 months (minimum 90 working days in a semester) duration.

**2. Eligibility:**

As per RMCAPP

**3. Admissions:**

Admissions to the first semester of M.C.A program shall be made on the basis of common admission policy of the State Government.

**4. Medium of Instruction**

The medium of instruction and examination shall be English.

**5. No. of Seats**

Maximum number of seats in the program of study will be decided by the committee of courses concerned on the basis of number of permanent teachers and the laboratory facilities available to teach each course of the program and will be notified after the approval of the competent bodies.

**6. Curriculum under Choice Based Credit System**

### **Terminologies:**

Choice Based Credit System (CBCS): The CBCS provides choice for students to select from the prescribed courses (core, elective or ability enhancement/Skill courses). The nomenclature used is the following:

**Program** means the conventional degree/PG courses offered such as B.Sc., M.C.A., Ph.D, Diploma etc.

**Discipline** means subjects in a program

**Courses** refer to papers in the conventional system

**Credit** means a unit by which the course work is measured. It determines the number of hours of instructions required per week.

## **6.2. Curriculum**

The credit system enables continuous evaluation of a student's performance, and allows the students to progress at an optimum pace suited to individual ability and convenience, subject to fulfilling minimum requirement for continuation.

The M.C.A Program 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 under courses of study and examination

The M.C.A. program shall have curriculum and course contents (syllabi) for the courses recommended by the committee courses and approved by the academic council of the university.

The program shall follow a credit based semester system. Each academic year is divided into two semesters as prescribed in **7.1**

### **Course Credit System/Structure**

In general, a certain quantum of work measured in terms of credits is laid down as the requirement for a particular degree. A student earns the credits for a particular

course by fulfilling the academic requirements viz. attendance and evaluation. In Two years MCA programme, number of credits shall be 120. Number of credits of a course for a semester is calculated as follows for the different types of instructions for a course. A course need not necessarily have all the three types of instructions given in the table below. Credits have to be adjusted accordingly.

Sr.No	Type of Instructions	Course	Credits
1	Theory/Class room instructions	One Lecture or tutorial hr/week	1
2	Practical, field work, Project	Two hours /week in the Laboratory/field	1
3	Seminar	One contact hour with the teacher/week	1

Credits are awarded to a student for Theory / Laboratory / Other Courses only if the student satisfies the minimum attendance requirement of 75% of the total classes held and the evaluation requirements.

### **Courses in the program.**

In each program, candidates will be required to offer specified number of courses under following:

**Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement for the program is termed as a Core course.

6.5.2 Elective Course is generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

(i) Discipline Specific Elective (DSE) Course: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by department which is offering the main discipline).

(ii) Dissertation/Project: An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.

(iii) Generic Elective (GE) Course: An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective.

6.5.3. Ability Enhancement Courses (AEC): The Ability Enhancement (AE) Courses may be of two kinds: Ability Enhancement Compulsory Courses (AECC) and Skill Enhancement Courses (SEC). “AECC” courses are the courses based upon the content that leads to Knowledge enhancement;

In the post graduation Program, all the students will be required to earn 4 credits of in Ability Enhancement Courses (if any) as audit course. The credits and grade points obtained in the audit courses shall not be counted towards calculation of SGPA and CGPA. Students can also offer various extra credit courses as Audit courses to earn extra credits and it is not mandatory for the students to offer these courses. These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge.

## **6. 6. Earning credits:**

For successful completion of M.C.A. Program, candidate will be required to earn minimum 120 credits during four semesters by

(i) Registering for a minimum specified number of courses.

- (ii) Attending minimum prescribed hours of instructions
- (iii) Undergoing continuous internal assessment
- (iv) Taking external end semester examinations

At the end of every course of a program, students who have earned credits undergoing the above procedures are awarded a letter grade in that course for which a student had registered. On obtaining a pass grade, the student accumulates the course credits as earned credits. A student's performance is measured by the number of credits that he/she has earned and by the weighted grade point average.

Grades obtained in the audit courses are not counted for computation of grade point average. However, a pass grade is essential for passing an earning audit course.

**Registering for a minimum specified number course.**

- (i) Each candidate declared eligible for admission for a specified semester of the M.C.A. program shall be required to register for
  - (a) Core courses
  - (b) Discipline specific elective courses
  - (c) Ability Enhancement Courses
- (ii) Online registration facility will be available for the students for registration purpose.
- (iii) Students are required to contact the Faculty advisor / counselor and get information about the course, pre-requisites for selecting a course, scope of the course, future prospects etc. Based on the previous performance of the students in pre-requisite courses, interest of the student in the elective and skill courses, the

faculty adviser will help a student in selecting elective and skill courses, earning extra credits, withdrawing from a course etc.

**(iv)** After obtaining the online registration form/data of registration, the department will enter name of the student in a Credit Bank Register maintained by each department under each course.

**(v)** Students will be offered elective courses and skill courses as per choices in the first cum first serve basis maintaining the spirit of choice based credit system.

**(vi)** The maximum number of students that can be admitted for an elective course or skill based course will be decided by the department based on number of teachers and facilities available for the course. Normally maximum number of candidates allowed to register for an elective or skill course should be limited to 20 to give individual attention to the candidates by the teacher.

**(vii)** A candidate may be allowed maximum period of one week to cancel the registration for a particular course and offer another elective or skill course provided a vacant seat is available for the course of candidates choice. If a candidate cancel his registration in a course, he will be treated as withdrawn from the course and will be allowed to offer an elective or skill course if a vacant seat is available only in another semester as and when the course is offered.

**(viii)** No elective course or skill course will be offered if a minimum specified number of students are not registered for the course. Normally the minimum number of students required to offer an elective or skill course will be 10. For courses offered under self finance courses, the minimum number of students required to offer the course will be notified on the basis of availability of a teacher having specific skill to offer the course and economic viability.

**(ix)** It will be mandatory for each Department/College to publish a list of elective courses, name of teacher allotted for each elective/skill courses, proficiency of the teacher in the skill/elective paper to enable the candidates to select the course.

(x) Only those elective course or skill course will be offered by the Department for which a competent teacher and adequate laboratory facilities are available in the department and which are certified by a committee consisting the Faculty Chairman, Head of the Department and one professor from university department concerned. The committee will physically check the facilities required for offering the skill or elective courses and satisfy themselves about the expertise of the teacher to teach the course.

(xi) Every department will be required to provide a list of facilities available in the core courses. For affiliated colleges, the committee recommending affiliation should have members specified under para (x) and will certify that facilities to offer the core courses, elective and skill courses exist with the college. If facilities are not available for elective courses and skill courses, these courses shall not be offered in the department.

(xii) If facilities for an elective course or skill course is not available in the department/college, students may be allowed to offered these courses as per the rules under Credit Transfer

(xiii) Each college shall be required to create facilities and offer at least the skill courses as given in the appendix-A

### **Attending minimum prescribed hours of instructions**

Regular attendance of the student is an important factor in the grading system. No grade can be given to a student unless he/she has attended the course regularly.

(i) Regular attendance is expected of all students for every registered course in theory, laboratory, field work etc. Hence attendance is compulsory and will be monitored in the semester and students will be informed at the end of the month and end of semester by the teacher concerned.

(ii) A maximum of 25% absence for the attendance may be condoned only on valid grounds such as illness, death in family or other emergency beyond students control and approved by the Head of the Department / Course Director. Sanctions are to be taken within a week after joining if on medical grounds. After condoning absence of the candidate a minimum 75% of the total classes held is mandatory for all the students to award credits and Grade points.

(iii) All the students whose attendance is less than 75% in a course will be marked X grade against the course in their marksheet irrespective of whether they have appeared in any of the examinations conducted by the University.

(iv) For Students participating in Sports / Cultural event/NCC camps during a semester, the maximum number of days of absence shall not exceed 8 days. Any waiver in this context shall be on the recommendation of the Dean - Student Welfare and the student will be required to apply in advance for the leave to the Head/Course Director through Faculty Advisor/Course Co-ordinator

(v) A student having attendance lower than 75% in a course will be detained by the course instructor and debarred from appearing in the ESE for that course in that semester and the student will have to re-register for the course as and when it is offered.

(vi) Overall Attendance in percentage of the total classes held will be printed on the mark sheet to validate the fact that Grades are awarded only to those candidates whose attendance is above 75%.

(vii) Candidates whose attendance is above 70% but failed to obtain a minimum 75% may be allowed to attend remedial classes arranged, if any, by the course instructor provided the candidate pays a prescribed fee per class towards conduction of such classes. However such classes shall not exceed 5% of the total classes held.

**(viii) Leave of Absence**



- a. If the period of leave is for a short duration (less than a week), prior application for leave shall have to be submitted to the Head/Course Director stating fully the reasons for the leave requested for, along with the supporting document(s). Such leave shall be granted by the Head/Course Director
- b. If the period of absence is more than 25% of the total number of instructions prescribed for that course, or is continuously absent for a period exceeding one month, the course instructor will inform name of such students to the Head of the Department and also publish name of such students on the notice board of the Department. A notice of cancellation of the Registration of the course and award of X-Grade will be informed to the candidate.
- c. Name of candidates whose attendance is less than 75% will be automatically removed from the registration data. Candidates whose attendance is more than 70% but less than 75% shall be required to re-register in the course by applying for remedial classes by depositing prescribed fee. The re-registration will be effective only if the candidate obtains a minimum attendance of 75% classes in the course concerned.

### **Undergoing continuous Internal assessment**

Continuous Assessment (CA) will be carried out through Internal Assessment which is an essential component of the M.C.A (CBCS) programme. The Academic Council of the University will decide from time to time on the system of examinations in each program in each semester. The following continuous Assessment method will be followed in the M.C.A. (CBCS) program:

(i) A student is evaluated for theory courses through Continuous Assessment (CA) with 20% weightage and End Semester External Examinations (ESE) with 80% weightage.

For a theory course of 100 marks, the CA component is 20 marks which consists of one internal semester examination of one hour duration (10 marks), and teacher evaluation (10 marks) through

(a) Home assignments. (5 marks)

(b) Class room test (Objective or short answer type)/ Class room viva/Quiz/Seminar etc (5 marks)

OR

(c) Teacher is free to evaluate and assess internal marks as per his/her discretion

In the case of Laboratory /field work courses of 100 marks, the CA component is 20 marks which consist of one internal examination conducted as per same pattern of end semester examination (10 Marks) and Teacher evaluation (10 marks) through

(a) Completion of all prescribed number of laboratory work/Practical verified regularly by the teacher (5 marks)

(b) Viva/Quiz and the during the practical work, practical skill of the student assessed by the teacher (5 Marks)

In the case of seminar, project work etc. of 100 marks, the CA component is 20 marks which consist of one internal assessment of presentation of work in the same pattern of External examination (10 Marks) and Teacher evaluation (10 marks) on the basis of

(a) Completion of the work as per objective (5 Marks)

(b) Project Skill/Communication Skill/Reference work etc. of the student assessed by the teacher (5 Marks)

(ii) Separate grades will be awarded for both Internal and External Assessment. The procedure of Absolute Grading System will be used for calculating Grades of CA and ESE in Masters Programme. Minimum marks for passing CA will be same as that of ESE.

The CA marks will be awarded by the teacher concerned and will be presented to the following committee for necessary approval. The teacher will be required to prepare a report of the students where the reasons to justify the award of Internal marks of more than 90% and less than 36% is to be given.

The committee is expected to make sure that the CA is carried out as per the rules and may call for the internal examination answer books, assignment details etc. if necessary.

- (a) Faculty Chairman/Principal or Nominee
- (b) Head of the Department/Course Director
- (c) Teacher Concerned

Since the Internal Assessment marks awarded is expected to follow a normal distribution, cases of giving inflated Internal Assessment marks, award of Internal Assessment marks without giving assignments etc. must be checked by obtaining marks for the individual components of CA as explained above and the marks awarded in each component should be displayed along with attendance of the students.

The Internal marks awarded and final attendance of the students must be displayed on the University web site using the Web Application for CBCS at least one week before the ESE. Grievances, if any, from the student shall be examined by the above committee. The student will be given an opportunity to represent his/her case to the committee.

**(iii)** The teacher shall announce the method of teacher evaluation at the beginning of the semester along with teaching Schedule. A teaching Schedule giving the Section/chapter of the Text book is followed, Reference books, Online Contents, date for submission of assignments, list of assignments, proposed date of assignment submission, Internal examination etc. as per details and examples given in the appendix.

(iv) All CA and ESE are compulsory for all students for award of credits in a course. The marking for all tests, tutorials and examinations will be on absolute basis. The final percentages of marks are calculated in each course as per the weightage indicated above.

(v) The final Internal Assessment marks finalized by the committee after hearing the grievances of the students must be uploaded on the Web site of the University.

(vi). If a candidate fails to attend an Internal examinations, in special cases and after being satisfied by the reason for absence, the department may conduct defaulters examination. The candidate will be required to pay prescribed fee for the defaulters examination to meet the expenditure towards conducting defaulters examination.

(vii) The laboratory course, whether offered as an independent course or as an attached course with a theory course will have continuous assessment for award of Internal Assessment marks.

Continuous Assessment of laboratory courses will be based on ,number of assignments/practical satisfactorily completed, punctuality, turn to turn supervision of student work, quality of work of journals, group discussions, overall understanding of the experiment and viva-voce examination (as per requirement of structure of course) .

(viii) The teacher shall announce the mode of evaluation and distribution of marks at the beginning of the laboratory course. It is obligatory to maintain and submit laboratory journal, prescribed documentation for the laboratory course and reports.

### **End Semester Examinations**

(i) The End-Semester Examination (ESE) shall generally be of three hours duration for each theory course and is held as per the schedule declared. The ESE for the laboratory course will be of minimum 6 hrs duration. The detail time-table

for this is declared by the university at the beginning of the Academic Session in the Academic Calendar of the Program.

(ii) Credits for a course will be awarded only if the student satisfies the minimum attendance requirements and acquires the necessary minimum grades for that course. Since a degree under CBCS awarded to a candidate who has not satisfied the minimum 75% attendance requirement is invalid, the teacher will be solely responsible for declaring a candidate eligible for appearing in the End Semester examination. So at least one week before the commencement of End Semester Examination, the teacher should enter the name of eligible candidates for appearing in the End Semester Examination of the Course with the approval of the Head of the Department. The Admit Card printed will bear the Non-Eligibility condition against the Course where he/she declared not eligible by the teacher, and the candidate shall not be allowed to appear in the End semester Examination in that course.

(iii) If a teacher or the college fails to declare a candidate eligible for appearing in the End Semester Examinations, the candidate will be assumed to be not eligible for appearing in the End Semester Examinations and the admit card will be made available accordingly to the students.

No credits are awarded if the student remains absent in internal examinations or ESE even though he/she has minimum attendance requirements.

## **7 Course Delivery**

In the CBCS, each theory course is assigned to a teacher for delivering lectures, assessment of students and management of the course such as drawing course delivery plan (teaching schedule), marking attendance, declaring attendance and assessment marks etc. Once a course is assigned to a teacher, he/she is expected to complete the instructional hours required for the course within the prescribed period. Any loss of teaching hours due to unforeseen events must be compensated by conducting extra classes. In the case of laboratory courses, one teacher per

batch of 20 students may be assigned to ensure personal attention to the laboratory work carried out by each student.

### **Procedure for awarding Grades**

(i) Absolute Grading System: Absolute grading system will be used if number of students appearing in the ESE of a course in a University is less than 300 as number of answer scripts of a course allotted to an examiner is normally 300. In the Master Program Grades in the Continuous Assessment will also be calculated using Absolute Grade System.

Grade	Marks Range
O	90% to 100%
A+	80% to 89.99%
A	70% to 79.99%
B+	60 % to 69.99%
B	50% to 59.99%
C	40% to 49.99%
P	36% to 40.99%
F	Less than 36%
X	Not Allowed to Appear ESE due to shortage of Attendance
Ab	Absent

### **(ii) Relative Grading System:**

This grading system will be used if number of students appearing in ESE of a course in a University is over 300. However, the grading in the Continuous Assessment will be through Absolute Assessment since number of students assessed by a teacher in a class is normally 60.

Grade	Marks Range
O	Top 5% in the Merit
A+	Top 15% excluding O
A	Top 35% excluding O and A+
B+	Top 65% excluding O,A+ and A
B	Top 85% excluding O,A+,A and B+
C	Top 95% excluding O,A+,A,B+ and B
P	Remaining in the merit
F	Less than 40%
X	Absent/Not Allowed to Appear ESE due to shortage of Attendance
Ab	Absent

**(iii) Grade “X”**

(a) The grade “X” is assigned to the student if his/her attendance is less than 75% in the Lectures/Tutorial/Laboratory course. A student with X grade shall not be permitted to take the ESE in that subject. The student will be detained for that subject only and will have to re register for the subject as and when it is offered and appears as and when it is conducted. However if a student is detained in any of the course he/she, will not be admitted to the next year, unless he/she Re-registers for that course and obtained passing grade

(b) An 'X' grade is treated as equivalent to F for purpose of CGPA calculation, and the following criteria in addition to poor attendance (less than 75% may be considered for the award of X grade :

(1) Badly incomplete in semester record (due to non-medical reasons) (for example, in the case of a student who has missed all tests and assignments etc.)

(2) Misconduct/use of unfair means in the examination, assignments etc., of a nature serious enough to invite disciplinary action in the opinion of the instructor. (It is emphasized that award of the X grade is in the nature of an immediate action in such cases, and the case may be referred to the Disciplinary Action Committee for consideration of further punishment depending on the seriousness of the offence). The names/roll numbers of students to be awarded the X grade should be communicated to the examination section in advance of the end-semester examination.

(C) The following rules apply for the course registered in any semester in which a student has acquired grade "X"

(i) He/she shall try to get a passing grade by registration for full examination in the next regular semester whenever it is offered. In this case the earlier performance of a student in all the evaluations will be treated as null and void.

(ii) A student registering for the course (Grade X) shall undergo all evaluations including CA and ESE and is eligible to acquire any grade as per his/her performance.

(iii) Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) will be calculated on the credit weighted average of the grade points obtained with letter grades countable in GPA based on ESE only. The Grades awarded in the Internal Assessment shall not be used in SGPA and CGPA.

**(v) The SGPA, CGPA Letter grades will be assigned as per table given below.**



Grade	Grade Point	Grade Definition
O	9.5 to 10.00	Outstanding
A+	8.5 to 9.49	Excellent
A	7.50 to 8.49	Very Good
B+	6.50 to 7.49	Good
B	5.50 to 6.49	Above average
C	4.50 to 5.49	Average
P	3.60 to 4.49	Below Average

(v) There will be no supplementary/due paper/special examination. The candidates can improve performance in the subsequent ESE and performance in the next appearance will overwrite earlier performance. Student will have to prepare on his own for improvement. Improvement in CA will not be permitted.

(vi) The University will issue a complete transcript of credits, grade obtained, SGPA and CGPA on declaration of each semester result and a Cumulative Transcript on the accumulation of minimum credits required for the award of Certificate/Diploma/Degree when EXIT is sought by the student.

(vii) Non collegiate students are not eligible for the award of M.C.A. (CBCS).

#### **Award of Grades:**

(a) The ESE will be conducted by the examination section of the university. The question papers will be set by the examiners appointed by the university as per the syllabus, teaching plan and model question paper. University may conduct centre evaluation of the answer books by inviting external examiners or the answer books may be sent to the individual examiners for evaluation. After the evaluation

of the answer books based on the CA and ESE marks, a semester board will award the grades.

(b) The semester board will consist of following

- (i) Faculty Chair person or nominee
- (ii) Convener of the Committee of Courses
- (iii) Head/Course Director
- (iv) Two teachers who taught the course

In case the semester board feels moderation/re-checking of the answer book is necessary, recommendation with reason will be sent for the consideration of the Result committee of the University. The semester board will maintain strict confidentiality of the marks and results. The result will be declared by the Controller of Examinations.

(c) Evaluated answer papers of CA and ESE should be preserved at least for a minimum period of one semester.

### **Calculation of SGPA and CGPA**

#### **A. Semester Grade Point Average (SGPA)**

- a) The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student
- b) The SGPA is the weighted average of the grade points obtained in all the registered by the student during the semester
- c) If a numerical grade point equivalent to letter grade obtained by the student for the course with credit  $C_i$  then, SGPA for that semester calculated using the formula

$SGPA (S_i) = \sum(C_i \times G_i) / \sum C_i$  where  $C_i$  is the number of credits of the  $i$ th course and  $G_i$  is the grade point scored by the student in the  $i$ th course.

Where the summation is for all the courses registered by a student in that semester. The SG PA is calculated using pass grades excluding Audit or skill papers. For example, if a student passes five courses in a semester with credits  $C_1, C_2, C_3, C_4, C_5$  and his/her grade points in these courses are  $G_1, G_2, G_3, G_4, G_5$  respectively, then SGPA is equal to

$$SGPA = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4G_4 + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

The SGPA is calculated to two decimal places and rounded off.

## **B. Cumulative Grade Point Average (CGPA)**

- (a) The overall performance of a student from the first semester onwards till completion of the program is obtained by calculating a number called CGPA
- (b) The CGPA is weighted average of the grade points obtained in all the courses registered by the student

$CGPA = \sum(C_i \times S_i) / \sum C_i$  where  $S_i$  is the SGPA of the  $i$ th semester and  $C_i$  is the total number of credits in that semester

Where summation is for all the courses registered by a student till that semester excluding Audit courses and Skill courses so that it reflects the performance of the student in the discipline of study. The CGPA is calculated only when the candidate successfully completes all the courses from first to last semester

- (c) The CGPA shall not include the grade points obtained in the skill courses or in the extra credit courses.

(d) The CGPA will be awarded only if a candidate obtain a minimum pass grade in all the Audit or skill courses.

## 8. Illustration of Computation of SGPA and CGPA and Format for Transcripts

### Computation of SGPA and CGPA

#### (a) Illustration for SGPA

Course Code & Name	Credit	ESE Marks	ESE Grade	CA Grade	ESE Grade Point	ESE Credit Point
Course-1	3	74	A	B	8	3X8=24
Course-2	4	54	B	A	7	4x7=28
Course-3	3	58	B	B	6	3x6=18
Course-4	3	92	O	A	10	3x10=30
Course-5	3	48	C	A	5	3x5=15
Course-6	4	57	B	B	6	4x6=24
TOTAL (Excluding Audit/skill Courses)	20	383				139

ESE: End Semester Examination, CA: Continuous Internal Assessment,

SGPA=139/20=6.95 Grade: B+

#### (b) Illustration for CGPA

Semester-1	Semester-2	Semester-3	Semester-4
Credit=20 SGPA=6.95	Credit=22 SGPA=7.80	Credit=25 SGPA=5.60	Credit=26 SGPA=6.00

Thus,  $CGPA = \frac{20 \times 6.95 + 22 \times 7.80 + 25 \times 5.60 + 26 \times 6.00}{93} = 6.52$  Grade: B+

93

## 9. Examination rules

- University will conduct examinations normally after completion of at least 90 working days of instruction in each semester as per examination schedule declared in advance. External examination will be conducted on consecutive working days without any gap.

- b) Each theory paper shall be of 100 marks (80 marks for written examination of 3-hrs duration and 20marks for Continuous Internal Assessment)
- c) Each practical/Project paper shall be of 100 marks (80 marks for semester practical examination of six hours duration and 20 marks for Continuous Internal Assessment).
- d) Marks obtained in the Continuous Internal Assessment and End Semester Examination will be converted in to letter grades as per range of marks obtained by the candidates.
- e) Candidates will be required to obtain a minimum pass grade in Internal Assessment and External Assessment separately. The CGPA and SGPA shall not include the Internal Assessment grades.
- f) In the Masters Programme, the grades obtained in the Audit courses, Skill courses, Extra Credit courses etc. shall not be used for SGPA and CGPA calculation. Only the grades obtained in the Core and Discipline Specific Elective courses shall be used. In the case of Project work, the grades will be counted towards SGPA and CGPA, if it is a Core/DSE courses.
- g) Grace Marks @ one mark/course will be awarded. One mark per course may be granted as a special grace by the Vice-Chancellor in a course. However, total grace marks shall not exceed six marks in a semester for the first attempt and three marks for all the Due/improvement courses in a semester. Grace marks shall not be counted towards merit posit position.
- h) The merit position of a candidate shall be decided on the basis of the absolute marks awarded to the candidate in the Core and Discipline Specific Elective courses at the end of the fourth semester end semester examination in the first attempt. The marks obtained by a candidate in any course through improvement or change of electives shall not be counted towards merit position.

- i) Masters Degree shall be awarded to the candidates whose satisfy following:
- (i) Obtained a minimum pass grade in each course registered except extra credit courses
  - (ii) CGPA is minimum 3.60
  - (iii) Minimum attendance in each of the course is 75% for the Regular category of students.
- j) The question paper for end semester theory examination shall consist of a total of 16 questions. Part-A shall consist of one compulsory question of 20 marks with ten parts covering the entire syllabus for which answer must be provided with a maximum of 50 words for each. Part-B will consist five long answer questions (which requires answers in maximum 250 words each), one from each unit with internal choice. Each question in the part-B will carry 8 marks each. Part- C will consist five questions , one from each unit, out of which answer must be given for any two questions 10 marks each using maximum 300 words. Only one answer booklet will be given to the students for answering all the questions. No supplementary answer books shall be allowed.
- k) The practical examination for End Semester Examination shall be conducted by the Department/College consisting the following:
- (a) Internal Examiner nominated by the Head of the department
  - (b) External examiner from the panel of Examiners approved by the University.

If marks awarded to any candidate is more than 90%, or less than 36% then the justification for the same must be given by the examiner in a prescribed performa along with the award.

All the Colleges and University Departments will inform and get approval of the schedule of practical examination in advance (at least one week before the commencement of examination) to the University. The Faculty Chairman may send an

observer to the examination Centre on the day of examination or in advance who will submit a report of the number of experiments as per syllabus available in the college and carried out by each student , maintenance of attendance record etc.

The Faculty chairman will examine the reports received and submit his/her to the university. On the basis of the report received from the Faculty Chairman, the Vice-Chancellor may order for re-conduct of the practical examination. The expenses towards the reconduct of the examination will be borne by the College concerned.

(e) A student who failed in a course will be allowed to re-appear in the End Semester Examination in that paper as and when it is again conducted by the University as per the syllabus of the course applicable for the current students.

(f) A student will also be allowed to improve his credits by appearing in the End Semester Examinations as per university rules. However, improvement shall not be allowed in Practical papers.

(g) A student shall not be eligible to improve his Grades in the Internal Assessment. However, a candidate who obtained Fail grade or X-grade in the Internal Assessment shall be allowed to re-appear in the Internal Assessment by applying to the Department and paying a prescribed fee. On the basis of his/her previous performance in the Assignments and Internal examinations, the student will be required to complete prescribed number of assignments and appear in the internal examination along with the current students.

**(h) Minimum passing marks and criteria for promotion to next**

**higher semester**

(i) A candidate will be declared PASS in a Semester if he/ she has minimum Pass Grade in each papers and shall be eligible for registration for the courses in the next semester.

- (ii) A candidate shall be PROMOTED from one semester to next semester if he/she has obtained minimum Pass grade in 50% of the courses registered.
- (iii) A candidate fails to obtain minimum pass grade in 50% of the courses shall be declared FAIL and shall be required to reappear in the External End Semester examinations (as and when conducted by the university) in the courses he/she failed to obtain a minimum pass grade and satisfy conditions for pass or promotion to the next higher semester. However, he/she shall be eligible for admission in the higher semester only when these semesters are offered by the university.
- (iv) A candidate who could not PASS in all the courses in each semester shall be required to re-register for the external examinations in the courses he/she failed to obtain pass grade and shall be required to pass all the due courses within 4 years from taking admission in the first semester.

(i) In case result of a semester is not declared by the university, before the starting of the next higher semester, the students who have appeared in all the courses in the semester will be allowed to attend the classes of the next higher semester at their own risk. Candidates who are not eligible to be promoted shall have to leave that semester.

(j) Evaluation of the Project will be carried out centrally at the University Departments only by a committee of examiners as given in para.12 (viii)

(j) Program Span Period: A candidate admitted to the MCA programme will be required to pass the course within four academic years from the year of admission to the first semester. The span period will be decided as on 1st July of an academic session. During the span period candidate is free to apply for cancellation of the grade awarded to him/her and reappear in the same by re-registering for the same or for any other course including elective courses by paying prescribed fee. In the case of new elective course, he/she shall be required to attend classes and undergo internal assessment and satisfy all the regulations for earning credits including Continuous Internal Assessment grades



(k) University examination rules for CBCS program approved by the Academic council of the University from time to time shall be applicable to students appearing in the Internal and External Examinations and will over ride the rules given above.

## **10. COURSE MANAGEMENT**

### **Faculty Adviser**

A student or a group of students is assigned to a faculty adviser from the concerned department, who will mentor the student throughout his/her tenure in the Institute. The students are expected to consult the faculty advisor on any matter relating to their academic performance and the courses they may take in various semesters / summer terms. The faculty advisor is assigned to extend guidance to the students enabling them to complete their courses of study for the required degree in a smooth and timely manner. Thus, the role of the faculty advisor is of immense importance. The faculty advisor is the person to whom the parents/guardians should contact for performance related issues of their ward. In view of the guidance to the students the role of faculty advisor is outlined as below

- (a) Guidance about the rules and regulations of the courses of study for the program
- (b) Pay special attention to weak students.
- (c) Guidance and liaison with parents of students for their performances and other personal problems a student may have.

### **Student Counselor**

Each College/Faculty/Department will make arrangement for a student Counselor who will provide the complete information about the Masters Program CBCS to the students as well as help them in the Registration. The Counselor will also help the Teachers for using the Web application for CBCS where uploading of attendance of the students, Teaching Schedule, Course syllabus, reminding

Departments and teachers for uploading Internal marks, declaring eligibility of candidates in the ESE, sending of marks and other information to the University etc. The student counselor will hear the grievances of the students and make a registration of grievances.

#### **: Maintenance of Student Registration Register**

Each college/Department will maintain discipline wise Student Registration Register where following information will be maintained for each semester session wise:

- (a) Brief Information of the students
- (b) Course registration details of Each Semester
- (c) Monthly attendance of the students in each course
- (d) Assignment marks in each course
- (e) Internal Examination Marks in each course
- (f) Final Internal Marks and Internal Credits in each course
- (g) University examination marks and Credits in each course
- (h) Details of the extra credits earned by the student

#### **: Maintenance of Attendance**

The Teacher in charge of the course will display monthly attendance as per the academic calendar on the Notice Boar/Web site. Candidates whose attendance is short will be informed to the parents of the candidate and Rs 100/- per letter will be deducted from the caution deposit of such students towards the Postal and office expenses.

### **11 Extra Credits and Credit Transfer**

A student can earn maximum 20 credits during Masters program by taking courses from various categories of courses given below. Students shall be required to apply to the University for earning extra credits before taking the credits and submit required documents after completion of the course to the

Faculty Chairman. Credit Transfer will be made only the credit earned is relevant to the programme and discipline of studies.

(a) Skill courses recognized by MHRD, Govt. of India

A student may offer certain professional courses/vocational courses recognized by the National Skill Development Centre and State Skill Development Centres during summer or as an evening course from an organization/training centers recognized by MHRD and is of minimum 60 hrs duration and obtain a certificate recognized by the State or Central Govt. bodies. The student will be required to submit an application for the consideration of a committee for credit transfer by attaching the following documents to the Department/College:

- (i) Information about the course, course contents, credit hours, passing criteria, examination etc.
- (ii) Recognition of Training Centre and Agencies/Bodies conducted examination by State Govt./Central Government
- (iii) Copy of the certificate issued by a competent body
- (iv) Brief write up of the relevance of competency in the Program

(b) Skill courses/Vocational courses conducted by the University/Affiliated Colleges

Students can take skill courses, vocational courses etc recognized by the university and offered at various units of the university or affiliated colleges. Credits/credits calculated on the basis of the number of hours of the course and marks obtained will be given as extra credits provided the course is relevant in the discipline of the program as recommended by the committee for credit transfer.

(c) Skill courses/ Vocational courses conducted by other universities

Students who have attended Skill courses/vocational courses under credit system and conducted by recognized Universities at the University centre or their affiliated Colleges can apply to the university for credit transfer by submitting following documents

- (i) Information about the course, course contents, credit hours, passing criteria, examination etc.
- (ii) Attendance certificate from the Department/College where the student attended the course

- (iii) Copy of the certificate issued by the University
- (iv) Brief write up of the Relevance of competency in the Program.

The committee will recommend transfer of credits on the basis of the performance in a personal interview/presentation by the candidate.

- (d) Internship/Elective Courses/Summer Projects/ Project work/Seminar etc. recognized by the University

**(i) Internship/Industry Project**

A student may be allowed to take summer projects or internships in other institutions and Industries and credits so earned can be transferred as extra credits after assessing the work of the candidate by the departmental committee. The industry/Institution where the summer project to be carried must be approved by the Departmental Committee. A proposal for summer project/Internship must be submitted by the student to the departmental committee before proceeding for the summer project/Internship. Candidate will be required to produce attendance certificate, satisfactory completion of the work and a report of the work carried out must be submitted for assessment by the Credit Transfer Committee. The committee will assign maximum 8 credits for Internship.

**(ii) Seminars**

Seminar is a course requirement wherein under the guidance of an internal guide a student is expected to do in depth study of topics allotted to them by doing literature survey, and understanding different aspects of the technology. It is mandatory to give a seminar presentation before a panel constituted for the purpose. Participation in the seminars by the students shall be compulsory. The credits shall be awarded on the basis of the following:

- (a) Understanding of the concept and presentation by the student concerned.(50%)
- (b) Literature survey & detailed report (25%)

(c) Active participation & attendance in the seminars (25%)

**(iii) Summer Projects/Minor projects /Training etc.**

Students are allowed to carry out summer projects/Minor Projects or undergo Industrial Training in recognized institutions by the department. The duration of the Summer projects /Minor projects/Training should be minimum two months duration. 12 credits will be awarded provided the candidate submits project/training report, attendance certificate showing a minimum 24 hrs/week work/training for four months duration. The candidate will be required to present his project/training report which will be assessed by a committee as described separately below and will award grade as per performance as well as taking in to consideration confidential reports of the Project/Training supervisor.

Minor Projects /Training also can be carried out in the University Departments in the Research laboratories with the permission of the department.

**12. Evaluation of Major/Minor Projects/Summer Training/ Internship etc for which credit to be awarded or credit transfer to be made.**

(i) All the students offering following courses shall be required to register for these courses.

(a) Major Project

(b) Minor Project

(c) Summer Project

(d) Industrial Training

(e) Internship

(ii) Students who wants to carry out Skill Courses/extra courses for credit Transfer will also be required to submit their application in advance.

- (iii) All the applications received by the Department will be considered and will be sent to the Concerned University Department /Skill Development Centre with their recommendation.
- (v) Within one week from date of receipt of the application, concerned University department will request the faculty chairman to call the meeting of the Credit Transfer Committee Meeting to evaluate the Proposal
- (vi) The Credit Transfer Committee will consist following members
- (a) Faculty Chairman
  - (b) Head of the Department
  - (c) Convenor of Committee of Course concerned
  - (d) One Senior Professor /Subject expert
- (vii) The Credit Transfer Committee will examine the required documents submitted by the candidate. If required the committee will ask the candidate to appear for an interview/test to ensure whether the candidate has acquired the skill. The committee may accept or reject the application for the Credit Transfer based on their assessment.
- (viii) In case of Major/Minor projects, Internships, Training etc., the candidate from University Departments and Affiliated colleges will be centrally evaluated by the following committee constituted and approved by the Faculty Chairman
- (a) Head of the Department
  - (b) One Internal Examiner from University department
  - (c) One External examiner (for Major Projects)
  - (d) Nominee of the faculty chairman( for Credit transfer cases)
- (ix). The credit transfer courses recommended by the above committee will be sent to Controller of Examinations after entering in the department Credit Register for incorporating it in the marksheets/certificates.
- (ix) If the course for which credit transfer is approved is a part of the Elective/Skill courses curriculum, then same will be printed on the marksheet by the

University. For other courses, the Faculty Chairman will issue necessary extra credit/Credit Transfer Certificate against a fee decided by the Faculty.

### **13 TEMPORARY WITHDRAWAL FROM THE PROGRAM**

A student seeking temporary withdrawal is granted permission by the Vice-Chancellor to withdraw from the Program for one semester/year for reasons of ill health or other valid reasons on the recommendations of concerned HOD/Course Director on the following terms:

The student applies to the Head/Course Director within four weeks of commencement of the term or from within four weeks of his / her last attendance in class whichever is earlier, stating the reasons for such withdrawal with supporting documents and endorsement of his/her parents.

The fee deposited for the current semester shall not be refunded for the students who applies for withdrawal after two weeks of commencement of the terms.

Normally, a student shall be permitted to avail of temporary withdrawal only once during the Program for a maximum duration of two semesters.

Such student who has discontinued and re-joins again will be governed by rules and regulations, courses of study, syllabus and fee in force at the time of his re-joining the Department. The joining time shall be the normal commencement of the term.

## Appendix-A

Details of the Elective Skill Courses recommended to be offered in the colleges in addition to the Specialized skill courses recommended by University Departments.

### **General Skill Courses for M.C.A.(CBCS)**

- (i) Communication and Presentation Skill
- (ii) Scientific Writing Skill
- (iii) Information and Communication Skills
- (iv) Mathematical and Analytic Skill ( For biological Sciences)

### Course outline

#### (i) Communication and Presentation Skill

Basic Language Skills, Comprehension of an unseen passage, Phonology and Stress Marking , Social and Official Correspondence, Interpretation of Short Unseen Literary Prose Pieces (fiction and non-fiction), Making presentations, public speaking. Detailed syllabus will be prepared by the Department of English and will be published on the web site.

#### (ii) Scientific Writing Skill

Introduction; principles of effective writing (cutting unnecessary clutter), Principles of effective writing (verbs), Crafting better sentences and paragraphs, Organization; and streamlining the writing process,,The format of an original manuscript, Reviews, commentaries, and opinion pieces; and the publication process, Issues in scientific writing (plagiarism, authorship, ghostwriting, reproducible research), How to do a peer review; and how to communicate with the lay public

Reference : <http://online.stanford.edu/course/writing-in-the-sciences>

#### (iii) Information and Communication Skills

Introduction to Important current Information technologies, Basics of Computer Hardware, Input Output devices, Specifications, System Software, Application software: Word processing, Desktop publishing, Spread Sheets, presentation, web authoring



graphing software. Network, Internet and Web, Internet Access, search tools, web utilities

Detailed syllabus including list practical will be published on web site of the University.

(iv) Mathematical and Analytic Skill (For biological Sciences)

This course details and syllabus will be made available on the university web site.

Instructions: Lectures and practical classes must be held as per teaching schedule.

Examination: The end Semester practical examination will be conducted by the University to test the skill acquired by the candidate.

# **Course Curriculum**

**2-Year M.C.A Degree Programme**

**(Batch 2022-23)**