ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY (A)
(An Autonomous Institution)
Aditya Nagar, ADB Road, Surampalem

Academic Regulations (ACETR23) for Master of Computer Applications

Applicable for students of Master of Computer Applications (MCA) PG Program admitted from the Academic Year 2023-24 onwards.

1. **AWARD OF MCA DEGREE**

   A student will be declared eligible for the award of MCA Degree if he fulfills the following academic regulations.

   1.1 If he pursued a program of study in not less than two and not more than four academic years. After four academic years from the year of admission, he shall forfeit his seat in MCA and his admission stands cancelled.

   1.2 The student shall register for all 80 credits and secure all the 80 credits.

2. **ADMISSION PROCESS**

   Admission to the above program shall be made subject to eligibility, qualification and specialization as prescribed the University from time to time. Admissions shall be made on the basis of merit rank obtained by the candidates at ICET examinations or the qualifying Entrance Test conducted by the University o on the basis of any other order of merit as approved by the University, subject to revisions as laid down by the Govt. from time to time.

3. **PROGRAM PATTERN**

   3.1 The total duration of MCA program is for two academic years and each academic year of study is divided into two semesters.

   3.2 The minimum number of instruction days in each semester is 90.

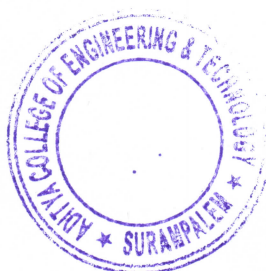   3.3 The medium of instruction for the entire program will be in English only.

   3.4 The credits allotted for a course depends on the following.

1 Hour Lecture (L) per week	1 Credit
1 Hour Tutorial (T) per week	1 Credit
1 Hour Practical (P) per week	0.5 Credit

   3.5 The student has to register for all courses in semester.

   3.6 All the credit courses shall be considered for the calculation of SGPA and CGPA.

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3.7 Every course shall be assessed using "Continuous Internal Evaluation (CIE)" and "Semester End Examination (SEE)". The CIE marks shall be based on the Sessional Examinations.

3.8 The student who is eligible to appear for the Semester End Examination in a course but absent from it or has failed in it, may write the examination in that course when conducted next.

3.9 When a student is detained due to shortage of attendance, he may be re-admitted into the same semester in which he has been detained.

4. ATTENDANCE REQUIREMENTS

4.1 A student shall be eligible to write the Semester End Examinations if he acquires a minimum of 50% of attendance in each course and 75% of attendance in aggregate of all the courses.

4.2 Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) on medical grounds in a semester may be granted by the College Academic Committee and a student can be condoned for a maximum of two times only.

4.3 Shortage of Attendance below 65% in aggregate shall not be condoned.

4.4 Students whose shortage of attendance is not condoned in any semester are not eligible to write their End examinations of that semester.

4.5 A medical certificate and a fee of Rs. 500/- shall be payable towards condonation for the shortage of attendance.

4.6 A student will be promoted to the next semester if he satisfies the attendance requirement of the present semester.

4.7 If any student fulfils the attendance requirement in the present semester, he shall not be eligible for re-admission into the same semester.

4.8 A student who has shortage of attendance in a semester any seek re-admission into the semester when offered within four weeks from the date of the commencement of classwork.

5. EVALUATION-DISTRIBUTION AND WEIGHTAGE OF MARKS

5.1 The performance of a student in each semester shall be evaluated course-wise with a

maximum of 100 marks for Theory courses, Lab courses, Socially Relevant Project using Design Thinking, Internship/ Industry Oriented Mini Project / Skill Development Course and Project work / Dissertation.

5.2 For the theory courses, the distribution shall be 30 marks for Sessional examinations and 70 marks for Semester End Examinations. The Sessional marks shall be awarded by giving a weightage of 80% for the best of the two Sessional Examinations and 20% for the other Sessional Examination. The first Sessional examinations is conducted for first 2½ units and second Sessional examination for remaining 2½ units for each course in a semester. Each Sessional examinations shall be conducted for duration of 120 minutes with 4 questions (without choice), each question is for 10 marks, and it will be reduced to 30 marks. The Semester End examinations is conducted for 70 marks for a duration of 180 minutes, which contains ten questions, two questions are from each unit and each question may have sub-questions. The student has to write one question from each unit. Each question carries 14 marks.

5.3 For lab courses, there shall be continuous evaluation during the semester for 30 Sessional marks and 70 End examination marks. The Sessional 30 marks shall be awarded as, continuous evaluations – 5 marks, Record – 5 marks and laboratory Exam – 20 marks. The End examination shall be conducted by the teacher concerned and external examiner appointed by the Principal. The Laboratory examination must be conducted with a breakup marks of Procedure – 20 marks, Experimentation – 25 marks, Results – 10 marks and Viva-voice – 15 marks.

5.4 A student is deemed to have passed a course (Theory or Lab) and earns the credits allotted to that course by securing not less than 40% of marks in the End examination, and a minimum 50% of marks of the total marks (sum of Sessional marks and Semester End Examination marks).

5.5 For Employability Skills, an internal examination would be conducted at the end of semester for 100 marks. A candidate has to secure minimum 50% of marks to be declared successful.

5.6 For Socially Relevant Project using design thinking, the evaluation shall be done internally at the end of semester by the Project Review Committee (PRC) * for 100 marks. A candidate has to secure a minimum 50% of marks to be declared successful.

* The PRC consists of Head of the Department (HOD), Supervisor, and a senior faculty member of the department.

5.7 For Internship / Industry Oriented Mini Project / Skill Development Course, the evaluation shall be done internally at the end of III semester by the PRC for 100 marks. The student shall complete the Internship / Industry oriented mini project / Skill development course during the summer break after II semester. For skill development course, the certificate obtained after successful completion shall be submitted to the PRC for evaluation. A candidate has to secure a minimum 50% of marks to be declared successful.

5.8 For Bridge course (Python Programming) as a Mandatory Course, the course shall be taken by student on MOOCs platforms like NPTEL / SWAYAM etc. with the approval of the HOD. The student needs to earn a certificate by passing the examination. The grade shall be awarded as "Satisfactory" in the II semester grade sheet if the student passes the exam and otherwise "Not Satisfactory" will be awarded. In case a student does not pass the course registered through MOOCs, the same may be registered again through MOOCs in the next semester.

5.9 Students going for Industrial Project / Thesis can complete the elective courses through MOOCs. Students opting MOOCs as Elective Course should register and participate in 12 weeks courses in NPTEL / SWAYAM etc. with the approval of the HOD. The HOD shall appoint one mentor for each of the MOOCs offered. During the course, the mentor monitors the student's assignment submission at the end of every week. The student needs to submit all the assignments given and needs to take final exam at the proctor center. The student needs to earn a certificate by passing the examination. The student will be awarded the credits given in the curriculum only upon submission of the certificate.

5.10 For Major Project, there shall be continuous assessment during IV semester. The Sessional Evaluation for 30 marks shall be done by the PRC based on two presentations given by each student on the topic of his project. The End Examination (Viva-Voce) for 70 marks shall be conducted by the committee that consists of an External Examiner, Head of the Department and Supervisor of the Project. For the Viva-voce, every student shall submit a thesis or dissertation on the topic approved by the PRC.

- Registration of Dissertation: A student is permitted to register for the project work after satisfying the attendance requirement of all the courses up to III semester.

- A student has to submit, in consultation with his project supervisor, the title, objective and plan of action of his project work for approval. The student has to initiate the project work, only after obtaining the approval from the PRC after the III semester end examinations. The project duration is for one semester.

- If a student wishes to change his supervisor or topic of the project, he can do so with the approval of the PRC. However, the PRC shall examine whether or not the change of topic / supervisor lead to a major change of his initial plans of project proposal. If yes, his date of registration for the project work starts from the date of change of supervisor or topic as the case may be.

- A student shall submit his status report at least with 2 reviews conducted by the PRC with a gap of one month between them. The Sessional Evaluation shall be made on the basis of these reviews and on the progress of the work evaluated by PRC.

- A student is permitted to submit Project Thesis only after the approval of PRC. For the approval of PRC, the candidate shall submit the draft copy of thesis and shall make an oral presentation before the PRC.

- Three copies of the Project Thesis certified by the supervisor shall be submitted to the College along with Plagiarism report (<50%).

- The external examiner shall be appointed by the Principal. The project thesis is sent to the same examiner for the adjudication.

- If the report of the examiner is favorable, Viva-Voce examination shall be conducted by PRC and the examiner who adjudicated the Thesis.

  - Student has to secure 40% of marks in the Viva-voce examination and a minimum aggregate to 50% of total marks in Viva-Voce examination and Sessional evaluation taken together.

  - If the report of the Viva-Voce is fail, the student shall retake the Viva-Voce examination only after three months. If he fails to get a satisfactory report at the second Viva-Voce examination, the student has to re-register for the project and complete the project within the stipulated time after taking the

approval from the Principal.

- If the report of the examiner is unfavorable, the student shall revise and resubmit the Thesis, in the time frame as decided by the PRC. If the report of the examiner is unfavorable again, the thesis shall be summarily rejected. The student has to re-register for the project and complete the project with in the stipulated time after taking the approval from the Principal.

6. RE-REGISTRATION FOR IMPROVEMENT OF SESSINAL MARKS

Following are the conditions to avail the benefit of improvement of Sessional marks.

6.1 A student shall be given no chance to re-register for each course provided the Sessional marks secured by a student are less than 50% and has failed in the End examination.

6.2 For re-registration, the student has to get approval from the Principal and has to pay the requisite fee which is of one third of the semester tuition fee before the start of the semester in which re-registration is required.

6.3 At any time, a student is permitted to re-register for a maximum of two courses in addition to the regular semester.

6.4 In the event of the student taking re-registration, his Sessional marks and End examination marks obtained in the previous attempt stand cancelled in that course(s). The attendance shall be calculated separately for the re-registered courses.

6.5 If the student gets required minimum attendance in any re-registered course(s), he shall be eligible for writing the End examination in that course(s). Otherwise, he shall not be permitted to write the End examination in that course(s). He shall re-register again in that course(s) when next offered.

7. AWARD OF DEGREE AND CLASS

7.1 GRADING

After each course is evaluated for 100 marks, the marks obtained in each course will be converted to a corresponding Letter Grade and Grade Point as give below, depending on the range in which the marks obtained by the student fall.

Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters A+, A, B, C, D, E and F. If a student is absent for the examination, it is denoted as AB.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.

For Credit Courses:

Range of Marks (%)	Letter Grade	Level	Grade Point
≥90	A+	Outstanding	10
≥80 to <90	A	Excellent	9
≥70 to <80	B	Very Good	8
≥60 to <70	C	Good	7
≥50 to <60	D	Satisfactory	6
<50	F	Fail	0
-	AB	Absent	0

For Mandatory Courses / Non-Credit Courses:

Range of Marks (%)	Letter Grade	Result
≥40	S	Satisfactory
<40	N	Not Satisfactory

7.2 CALCULATION OF GRADE POINT AVERAGE

i. Calculation of Semester Grade Point Average (SGPA)

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.

$$SGPA(S_i) = \frac{\sum C_i X G_i}{\sum C_i}$$

where C_i is the number of credits of the ith course and

G_i is the grade point scored by the student in the ith course

ii. Calculation of Cumulative Grade Point Average (CGPA)

The CGPA is also calculated in the same manner taking into consideration all the courses undergone by a student over all the semesters of a program.

$$CGPA = \frac{\sum C_i X S_i}{\sum C_i}$$

where S_i is the SGPA of the ith semester and

C_i is the total number of credits in that semester

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

iv. While computing the SGPA / CGPA, the courses in which the student is awarded zero grade points will also be included.

v. Grade Point Average can be converted into an equivalent percentage using

$$\text{Percentage of Marks} = (\text{CGPA} - 0.75) \times 10$$

7.3 *AWARD OF CLASS*

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of MCA degree, he shall be placed in one of the following four classes:

Class Awarded	CGPA secured from 80 Credits
First Class with Distinction	≥ 7.75 (Without any supplementary appearance)
First Class	≥ 6.75
Second Class	≥ 5.75 and < 6.75

8. WITHHOLDING OF RESULTS

If the student has any dues in the college or involved in indisciplinary / malpractice / court cases, his result will be withheld.

9. TRANSITORY REGULATIONS

9.1 Discontinued or detained students are eligible for re-admission (within the duration mention in item 1.1) as and when next offered.

9.2 The readmitted students will be governed by the regulations under which the candidate has been admitted.

9.3 There shall be no transfers from one college to another after the completion of the admission process.
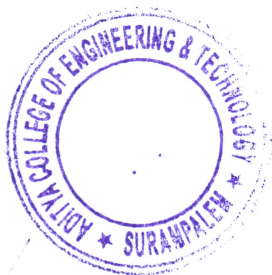
10. GENERAL

10.1 Wherever the words "he", "him", "his", occur in the regulations, they include "she", "her", "hers".

10.2 The academic regulations should be read as a whole for the purpose of any interpretation.

10.3 In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Academic Council is final.

10.4 The college may change or amend the academic regulations or syllabi as and when the need arises, and the change or amendments mad shall be applicable to all the students with effect from the dates notified by the college.

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