ADITYA ENGINEERING COLLEGE

An Autonomous Institution

ACADEMIC REGULATIONS (AR20) FOR MASTER OF COMPUTER APPLICATIONS (MCA)

Applicable for the students of Master of Computer Applications (MCA) PG Program admitted from the academic year 2020-21 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 by the University from time to time. Admissions shall be made on the basis of merit rank obtained by the candidates at ICET examination or the qualifying Entrance Test conducted by the University or on the basis of any other order of merit as approved by the University, subject to reservations 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 a semester.
- 3.6 All the credit courses shall be considered for the calculation of SGPA and CGPA.
- 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 A 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 may seek re-admission into that 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 examination is conducted for first 2½ units and second Sessional examination for remaining 2½ units for each course in a semester. Each Sessional examination 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 examination 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 evaluation -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-voce-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 Socially Relevant Project using design thinking and Employability Skills, 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.

- 5.6 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.
- 5.7 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.
- 5.8 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.
- 5.9 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.
- 5.9.1 Registration of Dissertation: A student is permitted to register for the project work after satisfying the attendance requirements of all the courses up to III semester.
- 5.9.2 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.
- 5.9.3 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 leads 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.
- 5.9.4 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.
- 5.9.5 A student is permitted to submit Project Thesis only after successful completion of theory and practical courses with the approval of PRC and not earlier than 20 weeks from the date of registration of the project work. For the approval of PRC, the candidate shall submit the draft copy of thesis and shall make an oral presentation before the PRC.
- 5.9.6 Three copies of the Project Thesis certified by the supervisor shall be submitted to the College along with Plagiarism report (< 50%).
- 5.9.7 The external examiner shall be appointed by the Principal. The project thesis is sent to the same examiner for the adjudication.
- 5.9.8 If the report of the examiner is favorable, Viva–Voce examination shall be conducted by PRC and the examiner who adjudicated the Thesis.
 - a. Student has to secure 40% of marks in the Viva–Voce examination and a minimum aggregate of 50% of total marks in Viva–Voce examination and Sessional evaluation taken together.
 - b. 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.
 - 5.10.9 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 reregister for the project and complete the project within the stipulated time after taking the approval from the Principal.

6 RE-REGISTRATION FOR IMPROVEMENT OF SESSIONAL MARKS

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

- 6.1 A student shall be given one 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 given 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 - 89	A	Excellent	9
70 - 79	В	Very Good	8
60 - 69	C	Good	7
50 - 59	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 the 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.

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

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 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 the program.

$$CGPA = \frac{\sum (C_i \times S_i)}{\sum (C_i)}$$

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

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

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	\geq 7.75 (Without any supplementary appearance)		
First Class	\geq 7.75 (With any supplementary appearance)		
That Class	≥ 6.75 and < 7.75 (Without any supplementary appearance)		
Second Class	≥ 6.75 and < 7.75 (With any supplementary appearance)		
Second Class	\geq 6.0 to < 6.75 (Without any supplementary appearance)		
Pass Class	\geq 6.0 to < 6.75 (With any supplementary appearance)		

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 candidatehas 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 changes or amendments made shall be applicable to all the students with effect from the dates notified by the College.

MALPRACTICES RULES Disciplinary Action for /Improper Conduct in Examinations

The Chief Controller of examinations shall refer the cases of malpractices in Sessional and End Examination to an Enquiry Committee constituted by him / her. The Committee will submit a report on the malpractice allegedly committed by the student to the Chief Controller of Examinations. The Chief Controller of Examinations along with the members of the Committee is authorized to impose a suitable punishment if the student is found guilty as per the following guidelines.

	Nature of Malpractices /	Punishment
	Improper conduct	
	If the candidate	
1(a)	Possesses or keeps accessible in the examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the course of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the course of the examination)	Expulsion from the examination hall and cancellation of the performance in that course only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the examination hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that course only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the course of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the courses of that Semester.
3	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical

		examinations and project work and shall not be permitted to appear for the remaining examinations of the courses of that Semester
4	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester. The candidate is also debarred for two consecutive semesters from class work and all Semester End examinations. The continuation of the course by the candidate is course to the academic regulations in connection with forfeiture of seat.
5	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester. The candidate is also debarred for two consecutive semesters from class work and all Semester End examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
6	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester. The candidate is also debarred and forfeits of seat.
7	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from the examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the

courses of the examination (including practical and project work) already appeared and shall not be allowed to appear for examinations of the remaining courses of that semester/year. candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the impostor is an outsider, he will be handed over to the police and a case is registered against him. 8 Refuses to obey the orders of the In case of students of the college, they Chief Controller of examinations / shall be expelled from examination halls Observer / any officer on duty or and cancellation of their performance in misbehaves or creates disturbance that course and all other courses the of any kind in and around the candidate(s) has (have) already appeared examination hall or organizes a and shall not be permitted to appear for walkout or instigates others to the remaining examinations of the courses walkout, or threatens the officerof that semester. The candidates also are in-charge or any person on duty in debarred and forfeit their seats. In the case or outside the examination hall of of outsiders, they will be handed over to any injury to his person or to any of the police and a police case is registered his relations whether by words, against them. either spoken or written or by signs by visible representation, assaults the officer-in charge, or any person on duty in or outside the examination hall or any of his relations. or indulges in any other act of misconduct or mischief which result in damage to or destruction or property in the examination hall or any part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination. 9 If a student of the college, who is Student expulsion from the examination not a candidate for the particular hall and cancellation of the performance examination or any person not in that course and all other courses the connected with candidate has already appeared including the college

	indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The candidate is also debarred and forfeits the seat.
10	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that course.
11	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that course and all other courses the candidate has appeared including practical examinations and project work of that End examination.
12	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the Chief Controller of examinations for further action to award suitable punishment.	



Prohibition of ragging in educational institutions Act 26 of 1997

Salient Features			
Ragging within or outside any educational institution is prohibited. Ragging means doing an act which causes or is likely to cause Insult or Annoyance of Fear or Apprehension or Threat or Intimidation or outrage of modesty or Injury to a student			
	Imprisonment Upto		Fine Upto
Teasing, Embarrassing and Humiliation	6 Months	+	Rs. 1,000/-
Assaulting or Using Criminal force or Criminal intimidation	1 Year	+	Rs. 2,000/-
Wrongfully restraining or on fining or causing hurt	2 Years	+	Rs. 5,000/-
Causing grievous hurt, kidnapping or Abducts or rape or committing unnatural offence	5 Years	+	Rs. 10,000/-
Causing death or abetting suicide	10 Years	+	Rs. 50,000/ -

In Case of Emergency CALL TOLL FREE NO.: 1800 - 425 - 1288

LET US MAKE ADITYA A RAGGING FREE CAMPUS



- 1. Ragging is prohibited as per Act 26 of A.P. Legislative Assembly, 1997.
- 2. Ragging entails heavy fines and/or imprisonment.
- 3. Ragging invokes suspension and dismissal from the College.
- 4. Outsiders are prohibited from entering the College and Hostel without permission.
- 5. Girl students must be in their hostel rooms by 7.00 p.m.
- 6. All the students must carry their Identity Cards and show them when demanded
- 7. The Principal and the Wardens may visit the Hostels and inspect the rooms at any time.

In Case of Emergency CALL TOLL FREE NO.: 1800 - 425 - 1288

LET US MAKE ADITYA A RAGGING FREE CAMPUS