

**ACADEMIC REGULATIONS FOR
MASTER OF COMPUTER APPLICATIONS PROGRAMME**
(UNDER CHOICE BASED CREDIT SYSTEM EFFECTIVE FROM 2022-23 ADMITTED BATCH)

REGULATIONS 2022 (R-22)



**COLLEGE OF ENGINEERING
(AUTONOMOUS)**

**GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING
(Autonomous)**

Madhurawada, Visakhapatnam 530048

Affiliated to Andhra University, Visakhapatnam

ACADEMIC REGULATIONS FOR MASTER OF COMPUTER APPLICATIONS PROGRAMME

(UNDER CHOICE BASED CREDIT SYSTEM EFFECTIVE FROM 2022-23 ADMITTED BATCH)

These Regulations shall be called the “Gayatri Vidya Parishad College of Engineering (Autonomous) Regulations- 2022 for the Award of MCA Degree”.

These regulations shall be applicable for students enrolling for MCA Degree programmes at the Institute from Academic Year 2022-23.

The admission of students shall be as per Govt. of Andhra Pradesh rules. The medium of instruction for course work and examinations at the Institute shall be English.

1. ELIGIBILITY FOR ADMISSION:

Admission to the above programme shall be made subject to the eligibility, qualifications and specialization as per the guidelines prescribed by the AICTE and the State Government from time to time.

2. AWARD OF MCA DEGREE:

A student shall be declared eligible for the award of the MCA degree, if he/she pursues the course of study and completes it successfully for not less than two academic years and not more than four consecutive academic years from the year of admission, otherwise, the student shall forfeit the seat in MCA Programme.

3. STRUCTURE OF THE PROGRAMME:

Semester	No. of courses		Credits
0	Bridge Course		0
I	5 THEORY + 3 LAB	$(1*4+1*2+3*3)+(2*1.5+1*1)$	19
II	4 THEORY + PE-I + 3 LAB + SBLE-I	$(4*3)+(1*3)+(1*1.5+1*2.5+1*1)+1*1$	21
III	4 THEORY + PE-II + 3 LAB + SBLE-II + INDUSTRY ORIENTED MINI-PROJECT / INTERNSHIP	$(4*3)+(1*3)+(2*1.5+1*1)+(1*1)+(1*2)$	22
IV	PE-III + PE-IV + SEMNAR + PROJECT WORK	$(2*3)+2+10$	18
TOTAL			80

PE-Professional Elective, SBLE-Skill Based Lab Elective

1 Credit for 1 lecture period per week and 1 credit for 1 tutorial period per week.

1 Credit for 2 laboratory periods per week.

4. REGISTRATION:

A student shall register for courses in each semester according to the choice provided and subjects offered by the concerned department.

5. ATTENDANCE REQUIREMENTS:

- i. A student shall be eligible to appear for end semester examinations if he / she acquires a minimum of 75% of attendance in aggregate of all the subjects in a semester.
 - In the case of students who participate in activities like NSS, NCC, sports, intercollegiate tournaments conducted at National level / State Level / University Level with prior approval of the Principal, the candidate may be deemed to have attended the college during the actual period of such activity, solely for the purpose of attendance.
 - Participating in the seminar, workshop, conference with prior approval of the Principal, the candidate may be deemed to have attended the college during the actual period of such activity, solely for the purpose of attendance permission. The maximum period of such events is limited to 10 days.
 - In the case of students admitted under special circumstances (late admission / transfer etc.), the candidate shall attend at least 50% of the total classes held during semester and shall have attended at least 75% of the total classes held from the date of admission.
- ii. Condonation for shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted on medical grounds. A stipulated fee shall be payable to the college towards condonation of shortage of attendance.
- iii. Students whose shortage of attendance is not condoned in any semester are detained and are not eligible to take their end semester examination of that class and their registration shall stand cancelled.
- iv. A student will not be promoted to the next semester unless he/she satisfies the attendance requirements of the present semester, as applicable. They shall seek readmission and continue his course of study from that semester when offered next.
- v. Attendance against each course will be indicated in the marks memo by a letter grade as follows:

Attendance	Grade
90% and above	A
75% to 89%	B
65% to 74%	C
below 65%	D

Letter grade “E” shall be awarded in case of attendance grade for online courses / any other certificate course offered by external agency.

6. METHOD OF EVALUATION:

The performance of a student in each semester shall be evaluated subject-wise with a maximum of 100 marks for each theory, practical and Project work.

6.1 Theory: The assessment shall be for 30 marks through Continuous Internal evaluation and 70 marks through end semester examination of three hours duration.

Continuous Internal evaluation: One part of the internal evaluation shall be made based on weighted average (2:1, with the higher score carrying a weightage of 2) of the marks secured in the two internal examinations of 20 marks each conducted one in the middle of the Semester and the other at the end of the semester. The remaining 10 marks are awarded through an average of two assignments / seminars / any other method, as notified by the teacher at the beginning of the semester.

End-semester examination:

For theory courses under Professional Electives, the question paper shall be set internally and valued internally through single valuation.

For all the other theory courses, the question paper shall be set externally and valued both internally and externally.

- i. If the difference between the first and second valuations is less than or equal to 10 marks (15% of 70 marks), the better of the two valuations shall be awarded.
- ii. If the difference between the first and second valuation is more than 10 marks (15% of 70 marks), the third examiner shall value the script. Out of the three valuations, the average of marks obtained in third valuation and the marks obtained nearer to third valuation out of first two valuations shall be considered.

Revaluation:

Revaluation of any theory subject / course shall be entertained within a stipulated period on payment of specified fee.

6.2 Laboratory: All the laboratory courses, except one credit labs, shall be evaluated for 100 marks, out of which for 50 marks through continuous internal evaluation and for 50 marks through external end semester examination.

The 50 internal marks are distributed as:

25 marks for day-to-day work (day-wise performance including observation, viva and record/reports) and 25 marks from two internal examinations.

The internal examination shall be conducted by the teacher concerned and another faculty member once for each cycle of instruction period and average of the two shall be considered for award of marks.

10 out of 12 to 16 experiments/exercises shall be completed in a semester.

6.3 Skill Based Lab Electives / 1 credit Labs: Skill Based Lab Electives shall be conducted from II semester on thrust areas each for a period of 32 hours. For all Skill Based Lab Electives and 1 credit labs, the examination shall be totally internal and conducted for 100 marks at the end of the course.

6.4 Industry Oriented Mini-Project / Internship:

Students shall carryout Industry Oriented Mini-Project / undergo internship during the break between II and III semesters of the Programme. Assessment shall be carried out in III semester through an Internal committee (comprising of HoD, Supervisor and a senior faculty of the department) based on Report, Presentation and Viva-voce for 100 Marks.

6.5 Seminar: There shall be a seminar presentation in IV semester. Assessment shall be carried out for 100 marks through an Internal committee comprising of HoD and two senior faculty of the department.

6.6 MOOCs Courses:

- i. Each of the 3 credit course under MOOCs shall be of minimum 12 weeks duration. One faculty in-charge shall be nominated for each course to monitor the registration and progression of the student. Attendance will not be counted for courses under MOOCs.
- ii. The Head of the department shall notify the list of such courses in advance. The student has to pursue and acquire a certificate for a course under MOOCs from the organizations / agencies approved by the BoS in order to earn the credits.
- iii. The students may also be permitted to register for a course under MOOCs (including SBLEs) ahead of the corresponding regular semester based on the start dates of course by external agencies.
- iv. If a course under MOOCs is not offered during the specified semester, the same or equivalent course under MOOCs may be offered in blended mode.
- v. If the external agency is unable to conduct examination or give grades/marks due to any unavoidable circumstances, the college shall conduct examination and give grades/marks.
- vi. In case a student fails in any course under MOOCs offered by college in blended mode, he/she shall appear in supplementary examination as and when conducted by the college.
- vii. In case a student fails in any course under MOOCs offered by external agency, he/she may be permitted to register for the same or equivalent or any other course approved in BoS.
- viii. The grades / marks given for a course under MOOCs by external agencies will be converted to the equivalent grades / marks of GVPCE(A).
- ix. If the external agency declares only Pass without any grade / marks for a course under MOOCs, the college shall award minimum grade corresponding to Pass criteria.

6.7 Supplementary examinations: Supplementary examinations for the odd semester shall be conducted with the regular examinations of even semester and vice versa.

6.8 Re-registration for failed courses: A candidate shall be given one chance to re-register for a maximum of two failed courses(s). The re-registration is permitted only after completion of IV semester as and when the subject(s) are offered. In the event of re-registering, the internal marks and end semester examination marks obtained in the previous attempt are nullified. However, the students who avail this provision are eligible for PASS / SECOND CLASS / FIRST CLASS only.

7. EVALUATION OF PROJECT WORK:

- a. A Departmental Project Review Committee (DPRC) shall be constituted with the Head of the Department as the Chairman and two senior faculty as Members to oversee the proceedings of the project work from allotment of topic to submission of the project.
- b. A Project Review Committee (PRC) shall be constituted with a Professor as Chair Person, supervisor and two senior faculty from the CSE / IT departments.
- c. Registration of Project Work: A candidate is permitted to register for the project work in the beginning of the IV Semester, only after satisfying the attendance requirement of all the courses up to III semester. The duration of the project is for one semester.
- d. After satisfying 7c, a candidate has to submit, in consultation with his project supervisor, the title, objective and plan of action of his project work to the DPRC for its approval. Only after obtaining the approval of DPRC the student can initiate the Project work.
- e. If a candidate wishes to change his supervisor or topic of the project, he can do so with the approval of the DPRC. If so, his date of registration for the project work shall start from the date of change of Supervisor or topic.
- f. Candidate shall submit and present the status report during two DPRC reviews after satisfying 7d. The two reviews / evaluation shall carry 20 and 30 marks, respectively. During each review, the DPRC has to approve the status report, for the candidate to proceed with the next stage of work.
- g. A candidate shall be permitted to submit his project work only after the approval of PRC. For the approval by PRC, the candidate shall submit a draft copy of the project work to the Principal through the Head of the Department and shall make an oral presentation before the PRC.
- h. Three copies of the project report, after plagiarism check (Similarity Index shall not exceed 40%) and certified by the Supervisor, shall be submitted to the College after approval by the PRC.
- i. For the final evaluation of the project work, an external examiner shall be selected by the Principal from a panel of 5 examiners who are experienced in that field proposed by the Head of the Department in consultation with the supervisor.
- j. The final evaluation, i.e., viva-voce examination, for 50 marks, shall be conducted by a board consisting of the supervisor, Head of the Department and the external examiner.
- k. A student is deemed to be passed, if he secures at least 25 marks in the final evaluation and 50 marks from both internal and final evaluation put together. If a student fails in project, he/she shall revise and resubmit the project report, in a time frame prescribed by the PRC. If the student fails once again, the project work shall be summarily rejected and the candidate shall change the topic and go through the entire process afresh.

8. PASS CRITERIA:

- a. For all the theory courses, a student is deemed to be passed if he secures at least 28 marks (40%) in the end semester examination and 50 marks (50%) from both internal and end semester examination put together.
- b. For all the laboratory courses, a student is deemed to be passed if he secures at least 25 marks (50%) in the end semester examination and 50 marks (50%) from both internal and end semester examination put together.
- c. For SBLEs, other 1 credit lab and Industry oriented Mini-Project / Internship and Seminar having examination / evaluation at the end of the course, a student is deemed to be passed if he secures at least 50%.
- d. For project work, the student shall PASS as per the criteria 7.k.

9. GRADING:

After each subject is evaluated for 100 marks, the marks obtained in each subject will be converted to a corresponding letter grade as given below, depending on the range in which the marks obtained by the student fall.

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

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 and F.

Marks Range	Letter Grade	Grade Point
90-100	A+ (Outstanding)	10
80-89	A (Excellent)	9
70-79	B (Very Good)	8
60-69	C (Good)	7
*50-59	D (Fair)	6
< 50	F (Fail)	0
-	Ab (Absent)	0

* Pass mark

Calculation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

- i. The Semester Grade Point Average (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, i.e.

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

where, C_i is the number of credits of the i^{th} subject and G_i is the grade point scored by the student in the i^{th} course

- ii. The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e. $CGPA = \frac{\sum (C_i \times S_i)}{\sum C_i}$ where 'S_i' is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester
- iii. Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the

transcripts.

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

10. AWARD OF CLASS:

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

Class Awarded	CGPA Secured
First class with distinction	≥ 7.5 (within two years and without any supplementary appearance)
First class	≥ 6.5
Second class	≥ 6.0 and < 6.5

CGPA to Percentage of Marks Conversion:

At the end of the Programme, Equivalent percentage of marks = **(CGPA-0.5)*10**

Transcript for each semester shall be issued containing letter grades and grade points along with attendance grade, for each of the courses registered, SGPA of that semester and CGPA up to that semester. Marks will not be displayed on the transcript. A consolidated transcript indicating the performance in all semesters shall also be issued.

11. MINIMUM ACADEMIC REQUIREMENTS FOR AWARD OF DEGREE:

A student shall be declared eligible for the award of the MCA. degree, if he / she pursues the course of study and satisfies the following:

- i. Earn **80** credits in not less than two academic years and not more than four academic years from the year of first admission.
- ii. Earn a minimum of 6.0 CGPA from all courses.
- iii. No disciplinary action pending against him / her.
- iv. Pay the prescribed fee for all the years.

TRANSITORY REGULATIONS FOR RE-ADMITTED STUDENTS

1. When a student is detained due to lack of credits / shortage of attendance, he / she may be re-admitted after fulfillment of academic requirements and as and when the semester is offered. In such case, he / she shall be in the academic regulations into which he / she is readmitted.
2. Credit equivalences shall be drawn for the students re-admitted into latest regulations from the earlier regulations. A Student has to register for the substitute / compulsory / pre-requisite courses identified by the respective Boards of Studies.
3. The student has to register for substitute courses, attend the classes and pass in examination and earn the credits.
4. The student has to register for compulsory courses, attend the classes and pass in examination

5. For the subject(s) failed in earlier semesters (before re-admission), the student has to acquire credits from the supplementary examinations as and when conducted.
6. In case of transferred students from other University / College, an equivalent course structure shall be prepared by the BoS of the respective department considering the suitable credits already acquired at the previous institution.
7. The students detained in earlier Regulations (under JNTU-K affiliation) and to be readmitted into R-22 Regulations (under AU affiliation) shall also follow the above guidelines subjected to the approval from both the Universities.
8. The decision of the Principal is final on any other clarification in this regard.

General:

- i. Where the words “he”, “him”, “his”, occur, they imply “she”, “her”, “hers”, also.
- ii. The academic regulation should be read as a whole for the purpose of any interpretation.
- iii. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Chairman, Academic Council is final.
- iv. The college may change or amend the academic regulations or syllabi from time to time 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

	Nature of Malpractices/Improper conduct	Suggested maximum Punishment*
	<i>If the candidate:</i>	
1. (a)	Possesses or keeps accessible in 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 subject 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 subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
1. (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 exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject 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 subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled.
3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from 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 subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
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 performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	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 subject.
6.	Refuses to obey the orders of the Chief Superintendent/Assistant – Superintendent / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to

	outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or 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 of 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.	the police and a police case is registered against them.
7.	Leaves the exam hall taking away answer script or intentionally tears the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the Committee appointed by the Principal for further action and impose suitable punishment.	

Suitable punishment shall be awarded based on the recommendations of a committee constituted in this regard.






* * * * *

Ragging

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 confining or causing	 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 Months	+	Rs. 50,000/-

Ragging
ABSOLUTELY
NO TO RAGGING

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 any time.