

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)

Academic Regulations (R20) for
MCA (Regular-Full time)

CHOICE BASED CREDIT SYSTEM (CBCS)

(Effective for the students admitted into I year from the Academic Year 2020-21 onwards)

VISION AND MISSION

Vision

"To be one among the premier Institutes of the country in producing Ethically strong and Technically sound engineers and managers to serve the Nation"

Mission

"To create sacred environment for the students to acquire knowledge through innovative and professional approach and utilize it for the welfare of the mankind"

FOREWORD

Siddharth Institute of Engineering & Technology, Puttur, Chittoor District, Andhra Pradesh is an autonomous institution conferred by University Grants Commission (UGC), New Delhi based on its performance as well as future commitment and competency to impart quality education.

The autonomous regulations, course structure and syllabi have been prepared after intense and detailed interaction with several expertise solicited from academics, industry and research, in accordance with the vision and mission of the institute in order to produce a quality-engineering graduate to the society.

All the faculty, parents and students are requested to go through all the rules and regulations carefully. Any clarifications needed are to be sought at appropriate time with principal of the institute, without presumptions, to avoid unwanted subsequent inconveniences and embarrassments. The cooperation of all the stakeholders is sought for the successful implementation of the autonomous system in the larger interests of the institute and brighter prospects of engineering graduates.

Dr. K. Chandrasekhar Reddy

Principal

ACADEMIC REGULATIONS

MCA Regular Two Year Degree Programme

(for the batches admitted from the academic year 2020-21 onwards)

NOTE: The regulations below are subject to amendments as may be made by the Academic Council of the College from time to time. Any or all such amendments will be effective from such date and to such batches of students (including those already undergoing the programme) as may be decided by the Academic Council. The Jawaharlal Nehru Technological University Anantapur, Ananthapuramu shall confer MCA Post Graduate degree to candidates who are admitted to the MCA Programs and fulfill all the requirements for the award of the degree.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In the following Regulations, unless the context otherwise requires:

- (i) “**Programme**” means PG Degree Programme: Master of computer Applications (MCA).
- (ii) “**Course**” means a theory or practical subject that is normally studied in a Semester, like Discrete Mathematics, Computer Organization, etc.
- (iii) “**College/Institute**” means Siddharth Institute of Engineering & Technology, Puttur.
- (iv) “**University**” means Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

2. ADMISSION PROCEDURE

Admissions are made to the first year of Two year MCA Degree programme as per the norms of A.P. State Council of Higher Education (APSCHE), Government of Andhra Pradesh.

3. PROGRAMME PATTERN

- ❖ A Candidate after securing admission must pursue the MCA programme of study for four semester’s duration.
- ❖ Each semester shall be for a minimum of 90 instruction days including examinations.
- ❖ A candidate admitted to a programme should complete it within a period equal to double the prescribed duration of the programme i.e., 4 years from the date of admission.

Credits:

Description	SEMESTER	
	Periods /week	Credits
Theory	04	04
Practical’s	04	02
Practical’s	03	1.5
Seminar	04	02
Project	20	10

4. AWARD OF M.C.A. DEGREE

A student will be declared eligible for the award of the M.C.A. Degree if he/she fulfills the following academic regulations:

- ❖ Pursues a programme of study for not less than two academic years and in not more than four academic years (double the duration) from the year of their admission.
- ❖ Register for 102 credits and secure all 102 credits.
- ❖ Students, who fail to fulfill all the academic requirements for the award of the degree within four academic years from the year of their admission, shall forfeit their seat in M.C.A programme and their admission stands cancelled.

5. PROGRAMMES OF STUDY

With the approval of AICTE & JNTUA, are offered for the MCA Programme from the academic year 2020-21.

6. EVALUATION

The performance of the candidate in each semester shall be evaluated subject wise, with a maximum of 100 marks for theory as well as practical subjects, on the basis of internal examination and end semester examination shall be 40% and 60% respectively.

- ❖ For theory subjects, the total internal weightage for theory courses is 40 marks with the following distribution.
 - 30 marks for Mid-Term tests
 - 10 marks for Assignments
- ❖ There shall be two mid-term tests in each semester. The duration of mid-term test shall be 2 hours. The test consists of 3 questions with individual choice (either or type) for 10 marks each. First mid-term test shall be conducted for 50% of the syllabus and second mid-term for the remaining syllabus. Between the two midterm examinations, 80% weightage will be given for the better performance and 20 % for the other. The final mid-term marks will be the average of the two mid-term examinations.
- ❖ For Theory subjects, 60 marks shall be for the End Semester Examinations. The following pattern shall be followed in the End Examination.
 - a. Five questions shall be set from each of the five units with either or type for 12 marks each.
- ❖ The duration of end semester examination shall be 3 hours.
- ❖ For practical subjects, 60 marks shall be for the End Semester Examinations and 40

marks will be for internal evaluation based on the day to day performance.

- ❖ A candidate shall be deemed to have secured the minimum academic requirement in a subject if he/she secures a minimum of 40% (i.e., 24) of marks in the end examination and a minimum aggregate of 50% (i.e., 50) of the total marks in the end semester examination and internal evaluation taken together.
- ❖ In case the candidate does not secure the minimum academic requirement in any of the subjects he/she has to reappear for the semester examination during supplementary examinations, or repeat the course when next offered or do any other specified subject as may be required.
- ❖ 10 marks allotted to assignments in each theory course shall be based on evaluation of 2 assignments (5 marks each) relevant to that particular course.
- ❖ For seminar, there will be an internal evaluation of 50 marks. A candidate has to secure minimum of 50 percent to be declared successful. The assessment will be made by a board consisting of HOD and two internal experts at the end of the semester instruction.

7. EVALUATION OF PROJECT WORK

Every candidate shall be required to submit the dissertation after taking up a topic approved by the college/ institute.

- ❖ Registration of Project work: A candidate is permitted to register for the project work after satisfying the attendance requirement of all the courses (theory and practical courses of I to V Semesters).
- ❖ Out of a total of 200 marks for the dissertation, 40% weightage shall be for internal evaluation and 60% weightage for the end semester examination. The end semester examination (viva-voce) for a batch of a maximum 20 students shall be conducted by the Internal examiner and External examiner.
- ❖ The external examiner nominated by the Principal. The evaluation of dissertation shall be conducted at the end of the VI semester.
- ❖ The internal evaluation shall be made by the departmental committee, on the basis of the three reviews given by the student on the topic of his/her dissertation.
- ❖ An Internal Departmental Committee (I.D.C) consisting of HOD, Supervisor and one senior faculty member of the department expert shall monitor the progress of the project work.
- ❖ The work on the project shall be initiated in the penultimate semester and the duration of the project is for one semester.

- ❖ The student must submit status report at least in four different phases during the project work period. These reports must be approved by the IDC before submission of the Project Report.
- ❖ A candidate shall be allowed to take viva-voce examination of the project, after fulfilling the attendance requirements.
- ❖ Three copies of the Project / Dissertation certified in the prescribed form by the supervisor & HOD shall be presented to the HOD, one copy is to be sent to the examiner.
- ❖ A candidate shall be deemed to have secured the minimum academic requirement in a Project viva-voce, if he/she secures a minimum of 40% of marks in the viva-voce examination and a minimum aggregate of 50% of the total marks in the viva-voce examination and Internal Evaluation together.
- ❖ If a candidate shall not be deemed to have secured the minimum academic requirement in a Project viva-voce, the candidate shall retake the viva-voce examination after three months. If he/she fails to secure the minimum academic requirement at the second project viva-voce examination, he/she will not be eligible for the award of the degree, unless he/she is permitted by the IDC & Principal to revise and resubmit the project.

8. RE-REGISTRATION FOR IMPROVEMENT OF INTERNAL EVALUATION MARKS

Following are the conditions to avail the benefit of improvement of internal evaluation marks.

- ❖ The candidate should have completed the course work and obtained examinations results for I & II semesters.
- ❖ He/she should have passed all the courses for which the internal evaluation marks secured are more than 50%.
- ❖ Out of the subject the candidate has failed in the examination due to internal evaluation marks secured being less than 50%, the candidate shall be given one chance for each theory course and for a maximum of three theory subjects for improvement of internal evaluation marks.
- ❖ The candidate has to re-register for the chosen courses and fulfill the academic requirements.
- ❖ For each course, the candidate has to pay a fee equivalent to one third of the semester tuition fee along with the requisition to the Principal.

- ❖ In the event of availing the Improvement of Internal evaluation marks, the internal evaluation marks as well as the end semester examinations marks secured in the previous attempt(s) for the reregistered courses stand cancelled.

9. SUPPLEMENTARY EXAMINATIONS

At the end of each Semester there will be regular examinations for the current Semester. Those students who could not clear their courses in their previous attempt can appear for the examinations under supplementary category along with the regular students after registering themselves at the examination branch. Supplementary examinations for the all the other Semesters other than the current one will also be conducted at the same time.

10. ATTENDANCE

- ❖ A student shall be eligible to appear for final examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects in a semester.
- ❖ Shortage of attendance below 65% in aggregate shall in **NO** case be condoned.
- ❖ Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted by the College Academic Committee.
- ❖ Students whose shortage of attendance is not condoned in any semester are not eligible to take their end semester examination of that class.
- ❖ A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester. They may seek re-admission for that semester when offered next.
- ❖ A stipulated fee shall be payable towards Condonation for shortage of attendance to the Institute as decided by the College Academic Committee.

11. WITHHOLDING OF RESULTS

If the candidate has not paid dues to the college or if any case of indiscipline is pending against him/her, the result of the candidate shall be withheld and he/she shall not be allowed/ promoted to the next semester. The issue of degree is liable to be withheld in such cases.

12. LETTER GRADE AND GRADE POINT

The letter grade and the grade points are awarded based percentage of marks secured by a candidate in individual course as detailed below:

Range in which the marks in the subject Fall	Grade	Grade Points (GP) Assigned
≥ 90	S (Superior)	10
80-89	A (Excellent)	9
70-79	B (Very Good)	8
60-69	C (Good)	7
50-59	D (Average)	6
< 50	F (Fail)	0
Absent	Ab (Absent)	0

Table – Conversion into Grades and Grade Points assigned

A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.

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

(i) Semester Grade Point Average (SGPA):

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.,

$$\text{SGPA } (S_i) = \Sigma (C_i \times G_i) / \Sigma C_i$$

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.

(ii) Cumulative Grade Point Average (CGPA):

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 program, i.e.

$$\text{CGPA} = \Sigma (C_i \times S_i) / \Sigma C_i$$

Where S_i is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester. The SGPA and CGPA shall be rounded off to 2 decimal points and

reported in the transcripts. While computing the CGPA the subjects in which the student is awarded Zero grade points will also be included.

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 S, A, B, C, D and F.

EXAMPLE: Computation of SGPA and CGPA

Illustration for SGPA:

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade)
Course-I	4	S	10	4x10 = 40
Course-II	4	A	9	4x9 = 36
Course-III	4	B	8	4x8 = 32
Course-IV	4	D	6	4x6 = 24
Course-V	4	B	8	4x8 = 32
Course-VI	1.5	B	7	1.5x8 = 12
Course-VII	1.5	B	8	1.5x8 = 12
Course-VIII	2	A	9	2x9 = 18
	25			206

Thus, SGPA = $206/25 = 8.34$

Illustration for CGPA:

Semester 1	Semester 2	Semester 3	Semester 4
Credit : 25	Credit : 26	Credit : 27	Credit : 24
SGPA: 8.24	SGPA: 6.9	SGPA: 7.3	SGPA: 6.8

$$\text{Thus, CGPA} = \left[\frac{(25 \times 8.24) + (26 \times 6.9) + (27 \times 7.3) + (24 \times 6.8)}{102} \right] = 7.31$$

13. AWARD OF CLASS

The following Class is awarded to the student on successful completion of the MCA Degree programme depending upon the CGPA obtained.

Class	CGPA
First Class with Distinction	≥ 7.5
First Class	$\geq 6.5 < 7.5$
Second Class	$\geq 5.5 < 6.5$
Pass Class	$\geq 5.0 \text{ \& } < 5.50$

Equivalent conversion of percentage of marks = (CGPA – 0.5) * 10

For example, student got CGPA = 7.69, he /she secures equivalent of percentage of marks = (7.69-0.5)*10 = 71.9 %

14. TRANSITORY REGULATIONS

Candidates who have discontinued or have been detained for want of attendance or who have failed after having undergone the course in earlier regulations and wish to continue the course are eligible for admission into the unfinished semester from the date of commencement of class work with the same or equivalent subjects as and when subjects are offered. However, the current academic regulations shall apply to them upon readmission.

15. AUDIT COURSE

One mandatory audit course as prescribed by AICTE is introduced in each semester. The student should secure 40% of marks in the examination(s) conducted. However the audit course has no external exam.

16. VIRTUAL LAB

To provide more practical/ experimental exposure to the students, apart from the physical labs, the student is instructed to conduct experiments in the virtual environment.

17. GENERAL

- ❖ The academic regulations should be read as a whole for purpose of any interpretation.
- ❖ Malpractice rules nature and punishments are appended.
- ❖ Where the words “he”, “him”, “his” occur in the regulations, they also include “she”, “her”, “hers”, respectively.
- ❖ In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal is final.
- ❖ The Institute, with the approval of the Academic Council, may change or amend the academic regulations / structure / credits / syllabi at any time and the changes or

amendments shall be made applicable to all the students on rolls with effect from the dates notified by the Institute.

**RULES FOR
DISCIPLINARY ACTION FOR MALPRACTICES / IMPROPER CONDUCT IN
EXAMINATIONS**

S. No.	Nature of Malpractices/Improper conduct	Punishment
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers, blue tooth or any other form of material concerned with or related to the course of the examination (theory or practical) in which he/she 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/she 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/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 for four

		<p>consecutive semesters from class work and all end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the courses of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining courses of that Semester/year. The candidate is also debarred for four consecutive Semesters from class work and all Semester end examinations if his involvement is established. Otherwise the candidate is debarred for two consecutive semesters from class work and all end 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/she will be handed over to the police and a case is registered against him.</p>
4	<p>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.</p>	<p>Expulsion from the examination hall and cancellation of performance in that course and all the 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/year. 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</p>

		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 course.
6	Refuses to obey the orders of the any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walkout or instigates others to walk out, or threatens the officer-in charge or any person on duty in or 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.	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that course and all other courses the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the courses of that Semester. If candidate physically assaults the invigilator or/officer in charge of the examination, then the candidate is also barred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.
7	Leaves the examination 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 performance in that course and all the 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/year. 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.
8	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/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 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/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 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/year.

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 Semester examinations depending on the recommendation of the committee.
12	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the Principal for further action to award suitable punishment.	

Note:

- i. All malpractices cases are to be handled by the Chief Controller with a committee consist of Controller of Examinations, HoD concerned and subject expert.
- ii. Whenever the performance of a student is cancelled in any course/ courses due to Malpractice, he has to register for the End Examination in those course/courses consequently and has to fulfill all the norms required for award of Degree.
