

ACADEMIC REGULATIONS, COURSE STRUCTURE AND DETAILED SYLLABUS

MASTER OF COMPUTER APPLICATIONS



**LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING
(AUTONOMOUS)**

**(Approved by AICTE, Accredited by NBA,
Affiliated to JNTUK and ISO 9001: 2000 Certified)**

**L.B.ReddyNagar :: Mylavaram-521 230 :: Krishna District
ANDHRA PRADESH STATE**

**ACADEMIC REGULATIONS FOR AUTONOMOUS STREAM
(2010-2011 Batch)**

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1. INTRODUCTION

Academic Programmes of the institute are governed by rules and regulations as approved by the Academic Council, which is the highest Academic body of the Institute. These academic rules and regulations are applicable to the students admitted during academic year 2010-11 into first year of three year Postgraduate programme offered by the college leading to Master of Computer Applications(MCA) degree.

1.1 LakireddyBalireddy College of Engineering, Mylavaram, an autonomous institution, follows Semester pattern for all three years of its Postgraduate MCA programme with internal and external evaluation.

1.2 Semester Pattern :Each academic year shall be divided into two semesters, each of 20 week duration, including instruction, evaluation, etc. Each semester consists of a minimum of 90 instruction days with at least 35 to 40 contact periods per week.

2. PROGRAMME OFFERED (POST GRADUATE)

Master of Computer Applications (MCA)

3. ELIGIBILITY CRITERIA FOR ADMISSION

The eligibility criteria for admission into I year MCA programme shall be as mentioned below:

- i. Admission to the above program shall be made subject to the eligibility, qualifications and specialization prescribed by the AICTE from time to time.
- ii. Admissions shall be made on the basis of merit rank obtained by the qualifying candidate at ICET examination or an entrance test conducted by the university subject to reservations prescribed by the University/State government from time to time.

4. AWARD OF MCA DEGREE

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

- i. Pursued a course of study for not less than three academic years and not more than six academic years.

- ii. The student has to fulfill all the academic requirements i.e. Registered for 158 credits and has to secure all the 158 credits with minimum grade points.

5. DURATION OF THE PROGRAMME

Students, who fail to fulfill all the academic requirements for the award of the degree within six academic years from the year of their admission, shall forfeit their seat in MCA course.

6. SEMESTER –WISE DISTRIBUTION OF CREDITS:

Year	First Semester Credits	Second Semester Credits	Total Credits
First Year	27+ Seminar - 1	24+ Seminar – 1 Credit + Mini Project – 1 Credit	54
Second Year	27+ Seminar – 1 Credit	24 + Seminar – 1 Credit + Mini Project – 1 Credit + 3 Credit based internship during summer vacation	57
Final Year	24+ Seminar – 1 Credit	Project Work – 20 Comprehensive Viva-2	47
		TOTAL	158

Table .1 Semesterwise Credits Distribution

- i) There shall be an internship of four weeks duration (summer vacation) in an industry/ top academic institutes of excellence/R&D Centers at the end of the second year second semester
- ii) The internship shall be supervised by a competent faculty member of the institute who in turn shall be in touch with the respective division head of the industry. The internships are compulsory and are credits based.
- iii) All the seminars and mini projects are credit based.

7. DISTRIBUTION AND WEIGHTAGE OF MARKS:

- i) In I-semester and III- Semesters, the course of study consists of 6 theory subjects + 2 laboratories. In II, IV and V semesters, the course of study consists of 5 theory subjects + 2 laboratories. However, the final year second semester (i.e. VI Semester) will be on project work only.
- ii) The performance of a student in each semester shall be evaluated subject wise with a maximum of 100 marks for theory and 100 marks for practical subject. In addition, Class room seminar, mini-project, Internship and project work shall be evaluated for 50, 50,100 and 200 marks respectively.
- iii) For theory subjects the distribution shall be 40 marks (35 for Test and 5 for attendance) for Internal Evaluation and 60 marks for the End- Examination.
- iv) For theory subjects,during the semester there shall be 2 internal tests, for duration of 120 minutes. First subjective test to be conducted in 1 – 2 units and the second test be conducted in 3 – 5 units in each of the Subject. However, the weightage(75% from Best + 25% from the other) of two tests shall be considered for awarding internal marks
- v) The internal test question paper should be for 40 marks. Out of 6 questions given, student has to answer any 4 questions.
- vi) For practical subjects there shall be a continuous evaluation during the semester for 40 sessional marks and 60 end examination marks. Of the 40 marks for internal, 15 marks shall be awarded for day-to-day work, 15 marks to be awarded by conducting Internal laboratory test, 5 marks for record work and 5 marks for attendance. The end examination shall be conducted by an external examiner and the teacher concerned.
- vii) Mini project shall be submitted in report form and should be presented before the committee, which shall be evaluated for 50 marks. The committee consists of the Head of the department, the Supervisor of mini project and a senior faculty member of the department. There shall be no internal marks for mini project. The student has to secure minimum 50% marks to be declared successful.

- viii) There shall be class room seminars from I year I Semester onwards. For the seminar, the student shall collect the information on a specialized topic and prepare a technical report, showing his/her understanding over the topic, and submit to the department, which shall be evaluated by the Department committee consisting of Head of the department, Seminar supervisor and a senior faculty member. The seminar shall be evaluated for 50 marks based on his/her presentation and the submitted report. There shall be no external examination for seminar. The student has to secure minimum 50% marks to be declared successful.
- ix) Summer internship will be evaluated for 100 marks. Evaluation will be conducted by a committee consisting of Head of the department and two senior faculty members of the department.
- x) At the end of VI Semester, Comprehensive viva will be conducted for 100 marks by a committee consisting of Head of the department, a senior faculty member of the department and an External examiner. Comprehensive Viva will be conducted on all the core subjects of entire MCA course. There is no internal evaluation for this.
- xi) **Project Work:**
1. 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 supervise the proceedings of the project work from allotment to submission.
 2. Registration of Project work:
A student is permitted to register for the project work after satisfying the attendance requirement of all the courses (theory and practical courses) up to V Semester. 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 from DPRC, the student can initiate the Project work.
 3. The duration of the project is for one semester.
 4. If a candidate wishes to change his supervisor or topic of the project, he can do so with approval of the Departmental Project Review Committee (DPRC).

However the departmental review committee shall examine whether the change of topic/supervisor leads to a major change of his initial plans of the project proposal. If so, his date of registration for the project work shall start from the date of change of supervisor or topic as the case may be or whichever is earlier.

5. Three copies of the project report, certified by the supervisor shall be submitted to the College.
6. Out of a total 200 marks for the project work, 50 marks shall be for Internal Evaluation and 150 marks for the End Semester Examination. The End Semester Examination (viva-voce) shall be conducted by the committee consisting of an External Examiner, Head of the Department and the Project supervisor. External examiner will be selected by the Principal/Director out of three member panel submitted by the Head of the Department who are eminent in that field of study. For maximum of 10 students, one project evaluation committee has to be formed.
7. If the work is not satisfactory, and the student could not secure the stipulated grade the student shall revise and resubmit the Project report after three months. If he/she fails to get a satisfactory report again, the project shall be summarily rejected.
8. The topics for mini projects, Internship and project work shall be different from each other. The evaluation of project work shall be conducted at the end of the III year.
9. The student has to clear all the subjects of MCA course to attend the Viva Voce of his/her project.
10. The project internal Evaluation shall be on the basis of two seminars given by each student on the progress of this project, during the project work period.

8. ATTENDANCE REGULATIONS & CONDONATION:

- i) A student shall be eligible to appear for end semester examinations, if acquired a minimum of 75% of attendance in aggregate of all the subjects.
- ii) Condonation for the shortage of attendance in aggregate up to 10% on medical grounds (65% and above and below 75%) in each semester may be granted by the College Academic Committee. However, the subject of granting is purely at the discretion of the College Academic Committee or competent authority.

- iii) A Student will not be promoted to the next semester unless he/she satisfies the attendance requirement of the present semester as applicable. They may seek re-admission for that semester as and when offered next.
- iv) Due weightage in each of the subjects shall be given to the attendance. Marks not exceeding 5 shall be given to all such candidates who satisfies the following criteria

% of attendance	Marks
≥ 90	5
85 to < 90	4
80 to < 85	3
> 75 to < 80	2
$= 75$	1

- v) Shortage of Attendance below 65% in aggregate shall in No case be condoned.
- vi) Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examination of that particular semester and their registration for examination shall stands cancelled.
- vii) A stipulated fee shall be payable towards condonation of shortage of attendance.
- viii) Attendance may also be condoned for those who participate in prestigious sports, co- and extracurricular activities provided their attendance is in the minimum prescribed range for the purpose and recommended by the concerned authority.

9. MINIMUM ACADEMIC REQUIREMENTS:

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no.8.

- i) A student shall be deemed to have secured the minimum academic requirement in a subject if he/she secures a minimum of 40% of marks exclusively in the end semester examination and a minimum aggregate of

50% of the total marks in the end semester examination and internal evaluation taken together.

- ii) A student will be promoted to second year, if he/she put up the minimum attendance requirement.
- iii) A student shall be promoted from II to III year only if he/she clears all the subjects of Semester-I, Semester-II of I year MCA.
- iv) Students who fail to earn 158 credits as indicated in the course within six academic years from the year of their admission shall forfeit their seat in MCA course and their admission shall stand cancelled.

10. COURSE PATTERN:

- i) The entire course of study is of three academic years. Each academic year shall have two semesters.
- ii) A Student eligible to appear for the end examination in a subject, but absent at it or has failed in the end examination may appear for that subject only as and when it is conducted.
- iii) All admitted students are to study 3 electives during their course of three year study at the institute. The following shall be the programme of study of electives.

Year	Semester	No. of electives
2	2	1
3	1	2

- iv) Final year II semester is completely reserved for project work.
- v) When a student is detained due to shortage of attendance/any other reason, he may be re-admitted when the semester is offered after fulfillment of academic regulations. Whereas, the academic regulations hold good with the regulations he/she first admitted.

11. AWARD OF GRADE:

After a student has satisfied the requirement 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 four grades. The award of the degree is on a grade point of scale 4. The grade points are awarded as follows:

Points	Title
>=3.00	Distinction
>=2.4 and <3.0	First division
>= 2.0 and <2.4	Pass division
<2.0	Fail

Based on the performance of the candidate, The following shall be the criteria for the award of letter grades at the end of each semester in the subjects in which the candidate appeared for the examination

Marks Scored	Grades	Grade points
>=90	S	4.00
>=85 to <90	A ⁺	3.67
>=80 and <85	A	3.33
>=75 and <80	B ⁺	3.00
>=70 and <75	B	2.67
>=65 and <70	C ⁺	2.33
>=60 and <65	C	2.00
>=55 and <60	D	1.67
>=50 and <55	E	1.33
<50	F	0

11.1 Calculation of Semester Grade Points Average (SGPA)

The performance of each student at the end of the each semester is indicated in terms of GPA. The SGPA is calculated as below:

$$SGPA = \frac{\sum(CR \times GP)}{\sum CR}$$

Where CR= Credits of a course

GP = Grade points awarded for a course

* SGPA (Semester Grade Point Average) is calculated for the candidates who passed all the courses in that semester.

11.2 Calculation of Cumulative Grade Point Average (CGPA) for Entire Programme.

The CGPA is calculated as below:

$$CGPA = \frac{\sum(CR \times GP)}{\sum CR}$$

(for entire programme)

Where CR= Credits of a course

GP = Grade points awarded for a course

12. MINIMUM INSTRUCTION DAYS:

The minimum instruction for each semester shall be 90 instruction days excluding examination days.

13. GENERAL:

- a. Where the words "he" "him" "his", occur in the regulations, they include "she", "her", "hers".
- b. The academic regulation should be read as a whole for the purpose of any interpretation.
- c. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Director is final.
- d. The Institute may change or amend the academic regulations or syllabi at any time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the Institute.

14. TRANSITORY REGULATIONS

14.1A candidate, who is detained or discontinued in the year/semester, on readmission shall be required to do all the courses in the curriculum prescribed for such batch of students in which the student joins subsequently. However, exemption will be given to those candidates who have already passed in such courses, which he/she had passed in the earlier semester(s) he/she was originally admitted into.

14.2 A student who is following the JNTU, Kakinada curriculum, detained due to lack of academics/attendance at the end of a semester of an academic year, shall join with the autonomous batch at the appropriate semester. Such candidates shall be required to pass in all the courses in the programme prescribed by concerned BOS for such batch of students, to be eligible for the award of degree. However, exemption will be given in all those courses of the semester(s) of the batch, which the candidate joins now, which he/she had passed earlier. The student has to clear all his backlog subjects by appearing the supplementary examinations, conducted by JNTU, Kakinada and Autonomous stream for the award of Degree. The marks secured by the students in JNTU-Kakinada pattern will be converted into appropriate grade points as per the autonomous grading system and the class will be awarded based on the academic performance of a student in the entire 3 years as per the guidelines of autonomous Pattern.

14.3 The concerned Board of Studies shall give the guidelines regarding 'Course Equivalence' and 'Course Exemptions' from time to time.

15. COURSE CODE AND COURSE NUMBERING SCHEME:

Course Numbers are denoted by 5 digit unique alpha numeric characters. First two digits are 'MC', that describes the Course name i.e. Master of Computer Applications.

Third digit represents semester of offering as mentioned in Table No. 3.

THIRD DIGIT	DESCRIPTION
1	First Semester
2	Second Semester
3	Third Semester
4	Fourth Semester
5	Fifth Semester
6	Sixth Semester

Table 3: Third digit description

Fourth digit represents course type, as per Table No. 4

FOURTH DIGIT	DESCRIPTION
0	Theory course
5	Lab course/other than theory subject

Table 4 : Course type description

Fifth digit represents course number as described in Figure 1 below. However, different courses are given distinct codes.

For example, MC105 course, the course is offered in the first semester (1), the course is of theory type (0) and the course number in that semester (5).

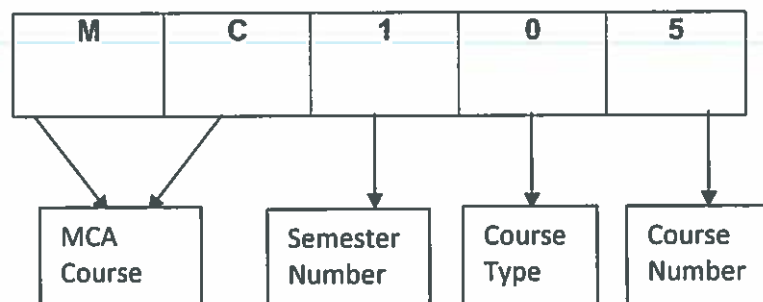


Figure 1: Course code description for courses

16. MEDIUM OF INSTRUCTION

The medium of instruction and examination is English.

17. AMENDMENTS TO REGULATIONS

The Academic council from time to time may revise, amend, or change the regulations, schemes of examinations, and/or syllabi.

18. GRADE CARD

The grade card issued shall contain the following:

- a) The credits for each course offered for that semester
- b) The letter grade obtained in each course
- c) The SGPA/CGPA
- d) Total number of credits earned by the student up to the end of that semester

19. CONDUCT AND DISCIPLINE

- a) Students shall conduct themselves within and outside the premises of the Institute in a manner benefitting the students of our Institution.
- b) As per the order of Honorable Supreme Court of India, ragging in any form is considered as a criminal offence and is banned. Any form of ragging will be severely dealt with.
- c) The following acts of omission and/or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures with regard to ragging.
 - i. Lack of courtesy and decorum; indecent behavior anywhere within or outside the campus.
 - ii. Willful damage or distribution of alcoholic drinks or any kind of narcotics to the fellow students/citizens.
- d) Possession, consumption or distribution of alcoholic drinks or any kind of narcotics or hallucinogenic drugs.
- e) Mutilation or unauthorized possession of library books.
- f) Noisy and unseemly behavior, disturbing studies of fellow students.
- g) Hacking in computer systems such as entering into other person's areas without prior permission, manipulation and/or damage of computer hardware and software or any other cyber crime etc.
- h) Usage of camera cell phones in the campus.
- i) Plagiarism of any nature.

- j) Any other act of gross indiscipline as decided by the academic council from time to time.
- k) Commensurate with the gravity of offense, the punishment may be reprimand, fine, expulsion from the institute / hostel, debarment from a examination, disallowing the use of certain facilities of the Institute, rustication for a specified period or even outright expulsion from the Institute, or even handing over the case to appropriate law enforcement authorities or the judiciary, as required by the circumstances.
- l) For an offence committed in (i) a hostel (ii) a department or in a class room and (iii) elsewhere, the chief Warden, the Head of the Department and the principal respectively, shall have the authority to reprimand or impose fine.
- m) Cases of adoption of unfair means and/or any malpractice in an examination shall be reported to the principal for taking appropriate action.
- n) All cases of serious offence, possibly requiring punishment other than reprimand, shall be reported to the Academic council.
- o) The Institute Level Standing Disciplinary Action Committee constituted by the academic council, shall be the authority to investigate the details of the offence, and recommend disciplinary action based on the nature and extent of the offence committed.
- p) The Principal shall deal with any academic problem, which is not covered under these rules and regulations, in consultation with the Program Committee in an appropriate manner, and subsequently such actions shall be placed before the academic council for ratification. Any emergency modification of regulation, approved by the academic council earlier, shall be reported to the academic council for ratification.
- q) **"Grievance and Redressal Committee" (General)** constituted by the principal shall deal with all grievances pertaining to the academic/administrative /disciplinary matters.
- r) All the students must abide by the code and conduct rules of the college.

20. MALPRACTICES

- a) The Principal shall refer the cases of malpractices in internal assessment tests and Semester-End Examinations, to a Malpractice Enquiry Committee, constituted by him/her for the purpose. Such committee shall follow the approved scales of punishment. The Principal shall take necessary action, against the erring students basing on the recommendations of the committee.
- b) Any action on the part of candidate at an examination trying to get undue advantage in the performance at examinations or trying to help another, or derive the same through unfair means is punishable according to the provisions contained hereunder. The involvement of the Staff, who are in charge of conducting examinations, valuing examination papers and preparing/keeping records of documents relating to the examinations in such acts (inclusive of providing incorrect or misleading information) that infringe upon the course of natural justice to one and all concerned at the examination shall be viewed seriously and recommended for award of appropriate punishment after thorough enquiry.

21. AWARD OF RANK

The rank shall be awarded based on the following:

- 21.1 Only such candidates who pass the Final year examination at the end of the third academic year after admission as regular final year students along with the others in their batch and become eligible for the award of the Degree shall be eligible for the award of rank. Candidates, who loose one or more years of study for any reason whatsoever are not eligible for the award of rank.
- 21.2 Ranks shall be awarded in each branch of study for the top five students appearing for the Regular external Examinations.
- 21.3 Award of prizes, scholarships, or any other Honors shall be based on the rank secured by a candidate, consistent with the desire of the Donor, wherever applicable.

