

UNIVERSITY OF CALICUT

(Abstract)

Faculty of Engineering – Regulation, Scheme and Syllabus of MCA – implemented – with effect from 2010 admission - Orders issued.

=====
=====

GENERAL AND ACADEMIC BRANCH - IV 'E' SECTION

No.GAIV/E1/AC/03-07-2010

Dated, Calicut University. P.O., 02-09-2010.

-
- Read: 1. Minutes of the meeting of the Board of Studies in Engineering (PG) held on 10-12-2009.
2. Minutes of the meeting of the Board of Studies in Engineering (PG) held on 28-01-2010.
3. Minutes of the meeting of the faculty of Engineering held on 29-01-2010.
4. Minutes of the meeting of the Academic Council held on 03-07-2010.

ORDER

As per paper read 1st, the Board discussed and approved the syllabus of MCA Course.

As per paper read 2nd, the Board of Studies in Engineering in its meeting hld on 29-01-2010 discussed and finalized the regulation and scheme of MCA course, to be implemented with effect from 2010 admission.

As per paper read 3rd, the meeting of faculty of Engineering at its meeting held on 28-01-2010, approved the decision of the Board of Studies for approving the regulations and scheme and syllabus of MCA and implementing the same from 2010 admission.

As per paper read 4th, the meeting of Council held on 03-07-2010 approved the decisions of Board of Studies held on 10-12-2009 and 28-01-2010 and the minutes of the faculty of Engineering held on 28-01-2010 for implementing the regulations, scheme and syllabus of MCA Course with effect from 2010-2011 admission.

Sanction has therefore been accorded for implementing the appended regulations, scheme and syllabi of the MCA course with effect from 2010 admission.

Orders are issued accordingly.

Sd/-
REGISTRAR

To

The Principals of all affiliated Engineering Colleges where MCA Courses are offered,

Copy to:

1. PS to VC /PA to Reg./PA to CE/

University of Calicut

Sd/-
SECTION OFFICER

Master of Computer Applications - Degree Course (With effect from 2010 admissions) Course Regulations

1. Conditions for Admissions

Candidates for admission to the MCA degree course shall be required to have passed a Bachelors Degree in any discipline of three year duration with Mathematics (this does not include Business Mathematics or Business Statistics) as one of the subjects or BCA under University of Calicut with at least 50% marks scored in the course undergone under the regular programme recognized by the Calicut University. 5% of relaxation in the marks will be allowed in the case of Candidates, belonging to socially and educationally backward classes. Candidates belonging to scheduled caste and scheduled tribe need only a pass in the qualifying examination. Candidates have to qualify the State Level Entrance examination conducted by the Commissioner of Entrance Examinations or State level/National level Entrance Examination approved by the Government of Kerala as equivalent. They shall also satisfy the conditions regarding age and physical fitness as prescribed by the University of Calicut.

Criteria for selection and method of admission to merit/management seats for Engineering degree/MCA degree courses conducted by Government/Aided/Self-financing colleges affiliated to University of Calicut shall be governed by the rules/regulations framed by the Commissioner of Entrance Examinations or other competent authority appointed by the Government of Kerala, in consultation with the University and without contravening with the stipulation of the All India Council for Technical Education (AICTE). In all matters related to selection and admission, the decisions of the University shall be final. The students admitted by affiliated colleges violating the above regulations will not be eligible for registration to University Examinations and contravention of the regulations shall lead to withdrawal/suspension of affiliation.

2. Subjects of Study

The subjects of study both theory and practical, shall be in accordance with the prescribed scheme and syllabi of each branch of study.

3. Duration of the Course

The course for the MCA degree shall extend over a period of three academic years comprising of six semesters. The maximum duration permissible for taking the MCA degree course is fixed as 6 years.

Classes of First semester shall be started latest by 1st September in all affiliated colleges of University of Calicut. The minimum number of working days in 1st to 6th semesters shall be 75.

4. Course Calendar

The course calendar, published by the University in advance, should be strictly followed for ensuring timely conduct of examinations and publication of results. The course calendar should be prepared by convening a meeting of Heads of Departments, MCA of all affiliated engineering colleges. This meeting should be convened before the commencement of each semester. Semester classes should be started and completed on the stipulated dates at all affiliated engineering colleges as notified by the University. Regular classes for the subsequent semesters will be started only after completing the examinations of the just previous semester. Regular classes at the affiliated engineering colleges should be suspended during the period of Centralized Valuation camp. Faculty members from affiliated engineering colleges who are assigned duty by the University for Centralized Valuation Camp should strictly attend the valuation at the specified centre; Head of each institution should ensure this. Faculty members appointed for Centralized Valuation Camp should necessarily have minimum three years teaching experience at MCA degree level.

Within a week after the commencement of classes of each semester, Head of each Institution should forward the list of faculty members working in the college along with their qualification and years of teaching experience, to the University. This is a mandatory requirement which should be strictly followed by Head of each Institution. **Head of each Institution shall ensure the availability of sufficient number of regular faculty members having experience and qualifications (as per AICTE guidelines) in the institution.**

5. Assessment of Students

Assessment of students for each subject will be done by internal continuous assessment and end semester examinations. Internal assessment shall be conducted throughout the semester. It shall be based on internal examinations, assignments (such as home work, problem solving, group discussions, quiz, literature survey, seminar, term-project, software exercises, etc.) as decided by the faculty handling the course, and other measures like regularity in the class. Assignments of every semester shall preferably be submitted in Assignment Book, which is a bound book similar to laboratory record. Course plan for each subject should be prepared by conducting a meeting at the University, inviting all the faculty members handling the subject in the affiliated engineering colleges of the University, before each subject in the new scheme commences for the first time. This is to facilitate uniformity in the teaching and evaluation process.

End-semester examinations of theory subjects will be conducted by the University and those of all practical subjects will be conducted at institution level. **End-semester examinations will be conducted only once in a year;** failed candidates will have to appear for the end-semester examinations along with regular students. **However, end-semester examinations of 5th semester will be conducted once in every semester.** Head of institution should take necessary steps to prevent any malpractices in the end-semester examinations. If any such instances are detected, they should be reported to the University without any delay.

Internal assessment marks of each theory and practical subjects should have a class average limited to 80%. If the class average of internal assessment marks of any subject is greater than 80%, normalization procedure should be applied to limit it to 80%. If the class average is not greater than 80%, absolute marks should be given. Internal assessment marks of theory and practical subjects,

both absolute and normalised, should be published in the college 10 days before sending it to the University so as to enable the students to report any corrections.

(a) Assessment in Theory Subjects

The marks allotted for internal continuous assessment and end-semester university examinations shall be 50 marks and 100 marks respectively with a maximum of 150 marks for each theory subject.

The weightage to award internal continuous assessment marks should be as follows:

Test papers (minimum two)	-	60%
Assignments (minimum two) such as home work, problem solving, group discussions, quiz, literature survey, seminar, term-project, software exercises, etc.	-	30%
Regularity in the class	-	10%

Full credit for regularity in the class can be given only if the candidate has secured minimum 90% attendance in the subject.

(b) Assessment in Practical Subjects

Practical examinations can be conducted internally with internal continuous assessment with 50 marks. Head of the institution/Department shall appoint two examiners for each practical subject in order to conduct end-semester examinations for practical subjects. **These examiners should necessarily have minimum two years teaching experience at MCA degree level. It will be the responsibility of Head of Institution/Department to appoint only qualified examiners having prescribed teaching experience and to maintain standard of practical classes and examinations.**

Award of marks in the practical subjects should be as follows:

Internal Assessment (50 Marks)

Regularity	-	10 Marks
Evaluation in the lab and Rough Record	-	10 Marks
End-semester Test	-	15 Marks
Viva	-	05 Marks
Fair Record	-	10 Marks

No candidate will be permitted to attend the end-semester test unless he/she produces certified record of the laboratory.

6. Pattern of Questions for End-Semester Examinations of Theory Subjects

The question papers of end-semester examinations of theory subjects shall be able to perform achievement testing of the students in an effective manner. The question paper shall be prepared in accordance with the following guidelines

- should contain seven full questions of 20 marks each
- each question should have minimum two subdivisions
- at least one question from each module and not more than two questions from any module
- covering all sections of the course syllabus
- unambiguous and free from any defects/errors

Second Evaluation before completion of Project ; 100
Marks

External Evaluation

External Examiner (Thesis Evaluation + Viva Voce) : 125
Marks
Internal Examiner (Viva Voce) : 25 Marks

Guide will be the Internal Examiner.

8. Credit System

Each subject shall have a certain number of credits assigned to it depending upon the academic load and the nature and importance of the subject. The credit associated with each subject will be shown in the prescribed scheme and syllabi. Each course shall have an integer number of credits, which reflects its weightage.

9. Grading

The university shall award the letter grade to students based on the marks secured by them in both internal assessment and end-semester examinations taken together in the subjects registered. Each letter grade indicates a qualitative assessment of the student's performance and is associated with a specified number of grade points. The grading system along with the grade points for each grade, applicable to passed candidates is shown below. All passed candidate will be allotted a grade S, A, B, C or D according to the total marks scored by him/her.

Total %marks, rounded off to the nearest value scored by the passed candidate	Corresponding Grade allotted	Grade Points
90 - 100	S	10
80 - 89	A	9
70 - 79	B	8
60 - 69	C	7
50 - 59	D	6

If a candidate does not pass a subject as per the conditions given in Section (7), he/she will be assigned an Unsatisfactory grade 'U' irrespective of his/her total marks. If a student does not pass a subject in two attempts, the maximum grade he/she can get is 'D' when he/she passes the subject in any subsequent examination, whatever be the marks scored by him/her.

A student is considered to have completed a subject successfully and earned the credits if he/she secures a letter grade other than 'U' in that course. Letter grade 'U' has zero grade point and the candidate has to write the examination again to improve the grade. A student's performance is measured by the number of credits that he/she has earned and by the cumulative grade point average (CGPA) maintained by him/her.

10. Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

(a) A Semester Grade Point Average (SGPA) shall be computed for all the students for each semester, as follows:

$$\text{SGPA} = \frac{(C_1 G_1 + C_2 G_2 + C_3 G_3 + \dots + C_n G_n)}{(C_1 + C_2 + C_3 + \dots + C_n)}$$

where, n is the number of subjects registered during the semester, C_i is the number of credits allotted to i^{th} subject as per the scheme, and G_i is the grade points corresponding to the grade awarded to the student for the subject.

(b) A Cumulative Grade Point Average (CGPA) shall be computed for all the students at the end of each semester by taking into consideration their performance in the present and the past semesters as follows:

$$\text{CGPA} = \frac{(C_1 G_1 + C_2 G_2 + C_3 G_3 + \dots + C_m G_m)}{(C_1 + C_2 + C_3 + \dots + C_m)}$$

where, m is the number of courses registered up to that semester, C_i is the number of credits allotted to i^{th} subject as per the scheme, and G_i is the grade points corresponding to the grade awarded to the student for the subject.

An up-to-date assessment of overall performance of a student is obtained by calculating CGPA. CGPA is weighted average of the grade points obtained in all the subjects registered by the students since he entered the MCA course.

(c) Both the SGPA and CGPA shall be rounded off to the second place of decimal and recorded as such for ease of presentation. Whenever the CGPAs are to be used for the purpose of determining the merit ranking in a group of students, only the rounded off values shall be made use of.

11. Improvement

Candidates shall not be allowed to improve the grade already obtained. However cancellation and reappearance will be permitted.

12. Attendance

A candidate shall be permitted to appear for the end-semester examinations only if he/she satisfies the following requirements:

- (a) He/she maintains not less than 80% attendance in the total number of working hours in each semester, all subjects of study in the semester put together
- (c) His/her conduct and Progress must be satisfactory

It shall be open to the Vice Chancellor to grant condonation of shortage of attendance upto 10% on the recommendation of the head of the institution in accordance with the following norms.

- Shortage shall not be condoned more than twice during the entire course.
- Candidate who is not eligible for condonation of shortage of attendance shall repeat the semester.

12.1 Duty Leave

Students are eligible for duty leave if they perform certain kinds of duties like representing the college in sports and games, etc. On recommendation from concerned faculty members, Head of Institution/Head of MCA Department shall sanction duty leave for the period of absence. The maximum limit of duty leave that can be granted to a student during a semester is 10% of the number of working hours in that semester.

Application for duty leave should be submitted to the Head of Institution/Head of MCA Department preferably before the duty is performed or within ten working days after returning from duty. If duty leave is sanctioned, the student shall meet the faculty members handling classes for him/her in that semester (within 2 weeks after returning from duty), and request them to mark duty leave granted in the record of attendance.

12. Registration for each Semester

Every candidate should register for all subjects of the end-semester examinations of each semester. A candidate who does not register will not be permitted to attend the end-semester examinations; he/she shall not be permitted to attend the next semester.

A candidate shall be eligible to register for any higher semester, if he/she has satisfactorily completed the course of study and registered for the examination of the immediate previous semester. He/she should register for the semester at the start of the semester before the stipulated date. University will notify the starting and closing dates for each semester.

.

.

13. Examination Monitoring Cell

Head of the each institution/Department should formulate an Examination Monitoring Cell at the department level for supervising all examinations, especially the internal examinations. This cell, with a senior staff member as Convener, shall consist of minimum three members (one shall be a lady). A clerical staff having computer skills shall also be assigned for the examination monitoring cell.

The collective responsibilities of the examination monitoring cell are

- (a) Schedule all end-semester practical examinations as per the course calendar
- (b) Officiate as the examination squad to keep a vigil on all end-semester examinations.

If any malpractices are found/reported by invigilators, inform these to the Head of Institution along with a report about the incident. Head of Institution shall forward all such complaints to the University.

- (c) Schedule all examinations conducted as part of internal assessment of students.

- (d) To receive any complaint from students regarding issues like out-of-syllabus questions, printing mistakes, etc. of end-semester examinations of theory and practical subjects. The cell shall investigate these complaints and if necessary forward it to university with specific comments.
- (e) To receive any complaints from students regarding internal examinations, inquire such incidents, and give a report to the Head of Institution/Department for necessary action.
- (f) In general, to function as an extended wing of the office of the Controller of Examinations of the University, at institution level.

To conduct all the theory examinations, a Chief Superintendent and an Assistant Chief Superintendent should be appointed by the Head of Institution. At least two external Additional Chief Superintendents should also be appointed by the University as Observers for conducting theory examinations in all affiliated Institutions.

14. Electives

All students shall choose five elective subjects, two in the fourth and three in the fifth semesters from a set of elective subjects prescribed in the syllabus and offered by the institution. There should be at least 25% students of the class for an elective subject to be offered. However, any student having a CGPA of not less than 7.0 shall be permitted to select an elective of his/her choice and register under a faculty, subject to the permission from the faculty and Head of Department. The student will have to study this subject on his own (self-study mode) or the classes of this subject shall be taken during off-hours.

Any student having a CGPA of not less than 8.0 shall also be permitted to take additional elective subjects if permitted by the Head of Department. This may enable him/her to register for less number of elective courses in the next semester if applicable. When the candidate registers for these extra electives, recommendation from the Head of Institution is to be attached. However, no student will be permitted to register for more than 5 electives during his course of study.

A student has the option of taking less number of electives in any semester so as to suitably adjust his/her pace of study. Ex. A student can opt for studying only one elective in 4th semester, instead of two electives specified in the scheme. He/she will have to complete the sufficient number of electives in later semesters. Minimum number of students for an elective shall be 15 and maximum 60. New electives may be introduced according to the needs of emerging fields in technology. The name of the elective and its syllabus should be approved by the university before the subject is offered as an elective.

15. Class Committee

Head of institution shall take necessary steps to form a class committee for each class at the start of classes of each semester. This class committee shall be in existence for the concerned semester. The class committee shall consist of the Head of Department, Staff Advisor of the class, a senior faculty member of the department, and three student representatives (one of them should be a girl). There should be at least two meetings of the class committee every semester; it shall be the responsibility of the Head of Department to convene these meetings. The decisions of the Class

Committee shall be recorded in a register for further reference. Each class committee will communicate its recommendations to the Head of Institution.

The responsibilities of the class committee are:

- (a) To review periodically the progress and conduct of students in the class.
- (b) To discuss any problems concerning any subjects in the concerned semester.
- (c) To identify weaker students of the class and suggest remedial measures.
- (d) Discuss any other issue related to the students of the class.

16. Eligibility for the Degree

No candidate shall be eligible for the MCA degree unless he/she has undergone the prescribed course of study for a period of not less than three academic years in an institution affiliated to the University of Calicut and has passed all subjects as per the prescribed syllabus.

17. Procedure for completing the course

- a. A candidate shall be required to complete the course and pass all the examinations within a period of 6 years after joining the course
- b. A candidate shall not be allowed to improve the marks already obtained
- c. However cancellation and reappearance along with the regular examination will be permitted

18. Classification of Successful Candidates

(a) A candidate who qualifies for the degree, passing all the subjects of the six semesters, in 3 academic years after the commencement of his course of study and secures not less than a CGPA of 8.00 of all the semesters shall be declared to have passed the MCA degree examination in First Class with Honors.

(b) A candidate who qualifies for the degree, passing all the subjects of the six semesters within 4 academic years after the commencement of his course of study and secures not less than a CGPA of 7.00 of all the semesters shall be declared to have passed the MCA degree examination in First Class.

(c) All other candidates who qualify for the degree passing all the subjects of the six semesters and not covered as per Sections 19 (a) and (b) and CGPA not less than 7 shall be declared to have passed the MCA examination in second class.

19. Grievance Cell

Each college should setup a Grievance Cell with at least four faculty members to look into grievances of the students, if any.

20. Anti-Ragging Cell

Head of Institution shall take necessary steps to constitute anti-ragging committee and squad at the commencement of each academic year. The committee and the squad shall take effective steps as specified by the Honorable Supreme Court of India, to prevent ragging.

21 College Transfer

A candidate shall not be eligible for college transfer and inter university transfer

(Notwithstanding all that has been stated above, the University has right to modify any of the above regulations from time to time as per University rules.)