

UNIVERSITY OF CALICUT

Abstract

Faculty of Engineering - Regulations of B.Tech Degree course (Regular) -Revised - With effect from 2014 admissions - approved - implemented - orders issued.

G & A - IV - E

U.O.No. 3139/2014/CU

Dated, Calicut University.P.O, 27.03.2014

Read:-1.Minutes of the combined meeting of the Chairmen of the 9 Board of Studies under the Faculty of Engineering and the Board of Studies in Engineering (UG) dt. 27.08.2013.

- 2.Minutes of the meeting of the Board of Studies in Engineering (UG) held on 07.01.2014 (item No. 1).
- 3.Minutes of the meeting of the Faculty of Engineering held on 20.01.2014 (item No.1).
- 4. Minutes of the meeting of the Academic Council held on 20.03.2014 (item No. II G)

ORDER

The Combined meeting of the Chairmen of the nine Board of Studies under the Faculty of Engineering and the members of the Board of Studies in Engineering (UG) at its meeting held on 27.08.2013 and the Board of Studies in Engineering (UG) at its meeting held on 07.01.2014, after detailed discussions pertaining to the revision and finalization of B.Tech course regulations to be implemented w.e.f 2014 admissions, and after incorporating the changes in conditions of admission as per Government order, changes in Registration for each semester as per court order, other changes in assessment of students etc in the new Course regulations, unanimously approved B.Tech Course Regulations 2014 (Regular) and recommended for the implementation of the same with effect from 2014 admission onwards, vide paper read 1 & 2 above.

Vide paper read 3 above, the Faculty of Engineering at its meeting held on 20.01.2014, vide item No.1, approved the minutes of the Combined meeting of the Chairmen of the nine Board of Studies under the Faculty of Engineering and the members of the Board of Studies in Engineering (UG) held on 27.08.2013 and the minutes of the Board of Studies in Engineering (UG) held on 07.01.2014 and entrusted the Dean, Faculty of Engineering to make some minor corrections in the course regulations of B.Tech course prepared by the Board. The Dean, Faculty of Engineering had

submitted the revised B.Tech course regulations after incorporating the minor corrections in the course regulations as resolved by the Faculty of Engineering held on 20.01.2014.

The Academic Council at its meeting held on 20.03.2014, vide per paper read 4 above, approved the minutes of the Board of Studies in Engineering (UG) held on 27.08.2013 & 07.01.2014 and the minutes of the Faculty of Engineering held on 20.01.2014, vide item No. II G.

Sanction has therefore been accorded for implementing the revised Regulations of the B.Tech Degree course (Regular) -With effect from 2014 admission onwards. (The B.Tech course Regulations are appended).

Orders are issued accordingly.

Muhammed S

Deputy Registrar

To

The Principals of all affiliated Engineering colleges.

(B.Tech Regulations will be available in the University Website.)

Copy To:

PSto VC/PA to PVC/PA to Regr/PA to CE/EX Sn/EGI Sn/DR-B.Tech Sn/Dean,

F/Engg/Chairman, BOS in Engg (UG)/System Administrator(With a request to upload the Syllabus in the University Website)

Forwarded / By Order

Section Officer

University of Calicut

Course Regulations

of

B.Tech. – Engineering Degree Courses

(With effect from 2014 admissions)

1. Conditions for Admissions

Candidates for admission to the B.Tech. Engineering degree course shall be required to have passed the Higher Secondary Examination, Kerala, or Examinations recognized as equivalent thereto, with 50% marks in Mathematics separately, and 50 % marks in Mathematics, Physics and Chemistry put together. However candidates who have obtained 45% marks in Mathematics separately and with 60% aggregate marks in Physics and Chemistry put together are also eligible for admission. (In case, the candidate has not studied Chemistry, the marks obtained in Computer Science shall be considered. In case, the candidate has not studied Chemistry and Computer Science, the marks obtained in Biotechnology shall be considered. In case, the candidate has not studied Chemistry, Computer Science and Biotechnology, the marks obtained in Biology shall be considered).

Candidates, belonging to Socially and Educationally Backward classes (SEBC) with a total family annual income not exceeding the limit notified by the Government of Kerala from time to time, need only 45% marks in Mathematics and 45% marks in Physics, Chemistry, and Mathematics put together. However, Socially and Educationally Backward Classes (SEBC) / Persons with Disabilities (PD) category candidates who have obtained 40% marks in Mathematics separately and with 55% aggregate marks in optional subjects are also eligible for admission. Candidates belonging to scheduled caste and scheduled tribe need only a pass in the qualifying examination. The amendments in qualifications for admission as notified by the Government of Kerala/ Commissioner for Entrance Examinations, Kerala from time to time will also be applicable for the admission to B.Tech Degree Course.

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.

2. Admission to Diploma Holders

A candidate who has a diploma in engineering awarded by the State Board of Technical Examinations or an examination recognized equivalent by the State Board of Technical Education after undergoing regular course of 3 years in an institute approved by AICTE, securing a minimum of 50% marks in the diploma examination shall be eligible to be admitted to the first year B.Tech. programme of the University of Calicut

(hereafter, the University, unless otherwise specified) if he/she has qualified the entrance examination conducted by the Commissioner of Entrance Examinations or State level/National level Entrance Examination approved by the Government of Kerala as equivalent. Diploma holders from other states should produce an Equivalence certificate from the Controller of Technical Exams, Kerala/State Board of Technical Examinations for admission to B.Tech course.

Diploma holders with minimum pass marks in diploma in engineering are also eligible for admission to the 3rd semester (regular full-time batch) engineering degree course (B.Tech.) under the lateral entry scheme provided they qualify the Entrance Examination conducted for the lateral entry scheme by the state Government. These students are not required to study any deficiency papers of the combined first and second semesters. Admission of all candidates under the lateral entry scheme shall be completed before the commencement of 3rd semester classes.

Part-time Degree Courses are offered for students possessing diploma in Engineering/Technology awarded by the State Board of Technical Education or equivalent to acquire B-Tech Degree. The Courses extend over a period of four years. The classes will be conducted normally in the evening on all working days and on holidays if necessary, in accordance with the syllabi of the University. Candidates should be admitted only to the branch of Engineering in which they have obtained the diploma. However certain branches of diploma courses are considered equivalent to certain branches for admission to the part-time B-Tech Courses. The details of which are given in Annexure.

Note: Criteria for selection and method of admission to merit/management seats for Engineering degree courses (admissions to the first year, under lateral entry and part-time schemes) 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 University Grants Commission (UGC) or 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.

3. 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.

4. Duration of the Course

The course for the B.Tech degree shall extend over a period of four academic years comprising of eight semesters. The first and second semesters shall be combined; the scheme and syllabi for combined first and second semesters ($S_{1\&2}$) will be common for all branches of study. The maximum duration permissible for taking the B.Tech. degree course is fixed as 8 years. Medium of instruction, examination, and evaluation shall be English.

Classes of combined first and second semesters shall be started latest by 1st August in all affiliated engineering colleges of University of Calicut; however admission to first year shall be completed by 31st August.

The minimum number of working days in combined first and second semesters shall be 150 days. In 3rd to 8th semesters, there shall be minimum 75 working days.

5. Branches of Study

- 1. Civil Engineering (CE)
- 2. Mechanical Engineering (ME)
- 3. Electrical and Electronics Engineering (EE)
- 4. Chemical Engineering (CH)
- 5. Production Engineering (PE)
- 6. Electronics and Communication Engineering (EC)
- 7. Instrumentation and Control Engineering (IC)
- 8. Applied Electronics and Instrumentation Engineering (AI)
- 9. Biotechnology (BT)
- 10. Biomedical Engineering (BM)
- 11. Computer Science and Engineering (CS)
- 12. Information Technology (IT)
- 13. Printing Technology (PT)
- 14. Automobile Engineering (AM)
- 15. Aeronautical Engineering (AN)
- 16. Mechatronics Engineering (MT)

6. 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 Principals 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 at the affiliated engineering colleges should be suspended during the period of centralised valuation camp. Faculty members from affiliated engineering colleges who are assigned duty by the University for Centralised Valuation Camp should strictly attend the valuation at the specified centre; Head of each institution should ensure this. Faculty members appointed for Centralised Valuation Camp should necessarily have minimum two years teaching experience at engineering 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.

7. Electives

All students shall choose four elective subjects, two each in the seventh and eighth 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/batch for an elective subject to be offered.

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.

8. 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 regularity in the class.

End-semester examinations of theory subjects will be conducted by the University. All End-semester practical examinations will be conducted at institution level for all

Government/Govt. aided engineering colleges. For all self financing engineering colleges, practical examinations will be conducted by the University. External examiners have to be appointed compulsory for the conduct of practical examinations in all self financing colleges. There shall not be any End-semester examinations for practical subjects in combined first and second semesters. End-semester examinations of combined first and second semesters and 3rd to 6th semesters will be conducted only once in a year. Supplementary and improvement candidates will have to appear for the end-semester examinations along with regular students. However, end-semester examinations of 7th & 8th semesters 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 all theory and practical subjects should have a class average limited to 80%. If the class average of internal assessment marks of any theory subject is greater than 80%, it should be normalized to limit it to 80%. If the class average is not greater than 80%, absolute marks should be given.

For practical subjects, end-semester examination marks of the candidates who have secured 40% or more marks should have a class average limited to 80%. If the class average of end-semester examination marks of practical subjects is greater than 80%, it should be normalized to limit the class average to 80%. If it is not greater than 80%, absolute marks should be given.

All the students in the nominal roll of the class on the closing day of semester should be considered for normalization of internal marks.

Normalized internal assessment marks of theory and practical subjects, 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%

-10%

Regularity in the class

It is permitted to have variation in this pattern of internal continuous assessment for subjects involving drawing, design, etc.

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

The marks allotted for internal continuous assessment and end-semester practical examinations shall be 50 marks and 100 marks respectively.

In Government/ Govt. aided institutions, Head of the institution shall appoint two examiners for each practical subject in order to conduct end-semester examinations for practical subjects. In self financing institutions, the University will appoint internal and external examiners for the conduct of practical examinations. These examiners should necessarily have a minimum of one year teaching experience at engineering degree level.

Award of marks in the end-semester practical examinations (except Project) should be as follows:

Fair record -10%

Viva voce -20%

Procedure and tabulation form,

Conducting experiment, results and inference -70%

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

Strict measures will be taken by the University to monitor the laboratory facilities, laboratory experiments conducted, standard of end-semester practical examinations, etc. in every affiliated engineering college. In this regard, an expert team comprising of at least three subject experts from government/government-aided engineering colleges from within/outside the University shall be formulated to assess these aspects in affiliated engineering colleges. This expert team should visit each engineering college at least once in a semester and submit a detailed report to the University regarding the laboratory facilities, laboratory experiments conducted and standard of end-semester practical examinations in each college. It will be the responsibility of each Head of Institution to inform this expert team about the schedule of end-semester practical examinations at least two weeks in advance.

9. 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

- (a) covering all sections of the course syllabus
- (b) unambiguous and free from any defects/errors
- (c) emphasizing knowledge testing, problem solving & quantitative methods
- (d) containing adequate data/other information on the problems assigned
- (e)) having clear and complete instructions to the candidates.

Duration of end-semester examinations will be 3 hours. The pattern of questions for theory subjects shall be as follows:

University Examination Pattern

PART A: Analytical/problem solving SHORT questions

8x 5 marks=40 marks

Candidates have to answer EIGHT questions out of TEN. There shall be minimum of TWO and maximum of THREE questions from each module with total TEN questions.

PART B: Analytical/Problem solving DESCRIPTIVE questions 4 x 15 marks=60 marks

Two questions from each module with choice to answer one question.

Weightage for categories such as problem solving, descriptive, drawing or programming questions shall be specified along with the syllabus of any subject, if necessary. Model question paper shall be prepared for each subject at the time of framing the syllabus. This same model question paper along with the syllabus must be sent to the question-paper setter every time for framing the questions. The model question paper shall be made available to students.

It is permitted to have an entirely different pattern of questions especially for subjects involving drawing, design, etc. However, the modified pattern to be followed shall be clearly specified along with the syllabus of the particular subject. All question paper setters should supplement the scheme and key for the evaluation

10. Minimum for Pass

(a) A candidate who secures not less than 40% marks in a subject at the end-semester examinations **and** not less than 50% of the total marks assigned to the subject, shall be declared to have passed the examination in that subject.

OR

(b) A candidate who secures in end-semester examination itself, 40% of the total marks assigned to a subject shall also be declared to have passed the examination in that subject.

The total marks assigned to a subject in the above calculations is the sum of maximum marks assigned to the end-semester examination and maximum internal assessment marks of that subject. Candidates will be assigned grades according to the marks scored.

For Seminar, Project, and Viva Voce, the minimum for a pass shall be 50% of the total marks assigned to the respective examination.

If a candidate has passed all examinations of B.Tech. course (at the time of publication of results of eighth semester) except Viva-Voce in the eighth semester, a reexamination for the Viva-Voce should be conducted within two months after the publication of results. Each candidate should apply for this examination within one week after the publication of eighth semester results. If any candidate fails for seminar/project, the candidate has to re-register for the respective semester and can repeat seminar/project retaining the marks secured in other subjects in that semester.

11. 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.

12. 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, D, or E according to the total marks scored by him/her.

If a candidate does not pass a subject as per the conditions given in Section (9), 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 'C'

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..

Percentage of marks (rounded off to the nearest integer) scored by the passed candidates	Corresponding Grade allotted	Grade Points
91- 100	S	10
81-90	A	9
71-80	В	8
61-70	С	7
51-60	D	6
40-50	E	5

For converting CGPA to percentage of marks, the following formula can be used. Percentage marks = $(CGPA - 0.5) \times 10$.

13. 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:

$$SGPA = \sum_{i=1}^{n} \frac{C_i G_i}{C_i}$$

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:

$$CGPA = \sum_{i=1}^{m} \frac{C_i G_i}{C_i}$$

i=1

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 B.Tech. 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.

14. Improvement

Candidates shall be allowed to improve the grade of any two theory subjects. This can be done only in the immediate subsequent chance. If the candidate gets more marks in the improvement chance, marks scored in the improvement chance will be considered for grading in the subject; otherwise marks scored in the first attempt will be retained. No candidate shall be permitted to improve the marks scored in practical examinations and internal continuous assessment.

15. Attendance

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

- a. He/she must secure not less than 75% attendance in the total number of working hours in each semester.
- b. He/she must earn a progress certificate from the head of the institution stating that he/she has satisfactorily completed the course of study prescribed in the semester as required by these regulations.
- c. His/her conduct must be satisfactory

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

- The shortage shall not be more than 10%
- Shortage upto 20% shall be condoned once during the entire course provided such shortage is caused by continuous absence on genuine medical grounds.
- 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.

Students are eligible for duty leave if they perform certain kinds of duties like representing the college/University in sports and games, etc. on recommendation from faculty members concerned, Head of Institution 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 total number of instructional hours engaged in that semester.

Application for duty leave should be submitted to the Head of Institution 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.

16 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 (i.e. 3rd semester onwards if he/she has satisfactorily completed the course of study and registered for the examination of the combined first and second semesters). A candidate shall be eligible to register for the fourth to eighth 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.

A pass in all subjects of combined first and second semesters is required for a student to become eligible for entry into the sixth semester, except for lateral entry students. A pass in all subjects of third and fourth semester would be mandatory for entry into eighth semester for all students. He/she can be permitted to register with the subsequent batch as and when he/she satisfies the eligibility condition.

As this rule for promotion is an academic prerequisite, no exemption should be granted in this case, whatever the causes. Head of institution should take necessary measures to implement this rule strictly.

A student can be transferred from one institution to another institution only in the beginning of 3rd semester of the course, after the completion of admission process. No branch change will be allowed after the completion of admission process.

A Student who has temporarily discontinued his/her studies shall be permitted to rejoin the course if he/she has to discontinue the course based on medical grounds and he/she should produce the medical certificate issued by a Govt. medical officer specialised in the respective field while rejoining the course. Maternity leave as admissible by the University will be admissible to female students as per the norms of the University in vogue.

17. Additional Requirements for the degree

In addition to the requirement prescribed for the award of B.Tech. degree, each student must complete compulsory social service for a specified duration during 3^{rd} to 7^{th} semesters

of the course, A record is to be kept showing the details of social service activities undertaken and it should be approved by the Staff Advisor. Head of Institution should verify this compulsory requirement before permitting the student to register for the eighth semester.

Students are expected to undertake industrial training(s) of total 5 days minimum duration or industrial visits (to minimum 3 industries) for studying about the industries of importance to the branch concerned during 4th to 7th semester. Students may also undertake an educational tour of maximum 5 days duration between 5th and 8th semesters for visiting industries (at least three) of importance to the branch concerned. Faculty members shall accompany the students for the industrial visits/educational tour. Each student shall submit detailed bound report(s) of the training/visit/tour to the Head of Department within two weeks after the programme. These bound report(s), signed by the staff advisor or faculty in charge of tour/training/visit and by the head of department, shall also be brought during the final Viva-Voce. 10% of marks of Viva-voce in 8th semester shall be based on the industrial training/educational tour/ industrial visits/paper published by the candidate at national/international level.

18. Examination Monitoring Cell

Head of the each institution should formulate an Examination Monitoring Cell at the institution 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 and inform the University two weeks in advance
- (b) inform the University expert team (two weeks in advance) the schedule of all endsemester practical examinations.
- (c) 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.

- (d) prepare and forward the list of examiners for all end-semester practical examinations to the Head of institution for enabling him to issue appointment letters. Inform the University the list of examiners for practical examinations.
- (e) after closing the end-semester examinations conducted at institution level of each semester, fill-up and return the check-list given by the University.
- (f) schedule all examinations conducted as part of internal assessment of students.
- (g) 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.

- (h) to receive any complaints from students regarding internal examinations, inquire such incidents, and give a report to the Head of Institution for necessary action.
- (i) 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 internally by the Head of Institution. At least one external Additional Chief Superintendent should be appointed by the University as Observer for conducting theory examinations in all affiliated Engineering Colleges, who shall be not below the rank of an Assistant Professor in a Government/Aided College or Assistant Registrar in the University.

19. 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 semester concerned. The class committee shall consist of the Head of Department, Staff Advisor of the class, a senior faculty member of the department, a faculty member from another 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 semester concerned.
- (c) to identify weaker students of the class and suggest remedial measures.
- (d) to review teaching effectiveness and coverage of syllabus.
- (e) discuss any other issue related to the students of the class.

20. Eligibility for the Degree

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

No candidate under lateral entry scheme shall be eligible for the B.Tech. degree unless he 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 of 3^{rd} to 8^{th} semesters as per the prescribed syllabus.

21. Classification of Successful Candidates

- a. A candidate who qualifies for the degree, passing all the subjects of the eight semesters within 5 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 B.Tech. degree examination in First Class with Honours.
- b. A candidate who qualifies for the degree, passing all the subjects of the eight semesters within 5 academic years after the commencement of his course of study and secures not less than a CGPA of 6.50 of all the semesters shall be declared to have passed the B.Tech. degree examination in First Class.
- c. All other candidates who qualify for the degree passing all the subjects of the eight semesters and not covered as per Sections 21 (a) and (b) shall be declared to have passed the B.Tech. degree examination in second class.
- d. Classification of the lateral entry student can be given based on the CGPA of 3rd to 8th semesters. The final mark-list of lateral entry students should indicate that (i) the student was admitted through lateral entry scheme (ii) classification is based on CGPA of 3rd to 8th semesters. He/she should have passed all the subjects of the 3rd to 8th semesters within 4 academic years after the commencement of the course of study.
- e. A Certificate of Excellence will be issued to top 5% of the number of students in eighth semester of each branch in the University, based on their aggregate CGPA of the B. Tech. course. These students should have passed all the subjects of B. Tech. course within 4 academic years after the commencement of their course of study; for lateral entry students this maximum period for passing the course shall be 3 years. Based on the aggregate CGPA, top 5% of candidates in each branch shall be issued a certificate of excellence.

Name of the college where the candidate studied for the B.Tech. program shall be printed in each grade-card issued to the student. It may be indicated in each mark-list that the internal assessment marks of all subjects and end-semester examination marks of practical subjects are normalised.

22. Grievance Redressal Cell

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

23. 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.

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.

 ${\bf Annexure}$ Equivalency of Diploma Streams for Part-Time B.Tech. Admission

Sl. No.	Specialisation in Diploma	Branch Equated for B.Tech.Admission	
1	Applied Electronics		
2	Electronics		
3	Medical Electronics		
4	Electronics and Avionics		
5	Telecommunication Technology		
6	Electronics and Instrumentation		
7	Electronics and Medical	Electronics and Communication Engineering	
8	Electronics Production Technology		
9	Medical Instrumentation		
10	Power Electronics		
11	Biomedical Engineering		
12	Civil		
13	Architecture	Civil Engineering	
14	Ouantity Survey and Construction		
15	Mechanical		
16	Automobile		
17	Tool and Die	Mechanical Engineering	
18	Wood and Paper Technology		
19	Computer Engineering		
20	Computer Application and Business		
21	Computer Hardware Maintenance	Computer Science and	
22	Information Technology		
23	Electrical	Electrical and Electronics	
24	Instrument Technology		