

UNIVERSITY OF CALCUTTA

Faculty of Engineering and Technology

A. Regulations for 4-year 8-semester B. Tech. course

(With effect from the academic year 2024 - 2025)

These regulations provide common framework for curricula of all the technology degrees offered under Faculty of Engineering and Technology, University of Calcutta. These common regulations are to be read along with the detail curriculum/syllabus of a particular B.Tech. degree for complete CSR of that degree.

1. Degrees Offered

The Faculty of Engineering and Technology, University of Calcutta shall provide instructions leading towards the 4-year, 8-semester B.Tech. degree in different **Engineering/ Technology** streams as mentioned in TABLE–1 below.

TABLE-1

| Sl. No. | Degree offered | Degree Code (CCC) |
|---------|---|-------------------|
| 1 | Computer Science and Engineering (CSE) | 401 |
| 2 | Information Technology (IT) | 402 |
| 3 | Optics and Optoelectronics Engineering (OOE) | 403 |
| 4 | Electronics and Communication Engineering (ECE) | 404 |
| 5 | Electrical Engineering (EE) | 405 |
| 6 | Instrumentation Engineering (IE) | 406 |
| 7 | Chemical Engineering (CE) | 407 |
| 8 | Chemical Technology (CT) | 408 |
| 9 | Polymer Science and Technology (PST) | 409 |
| 10 | Jute and Fibre Technology (JFT) | 410 |

In general, the duration of study is of four years comprising eight semesters, each semester being of six months' duration.

Note:

The CSR number for this common REGULATION would be:

CSR/CUBTECH/YYYY dated (dd/mm/yyyy)

YYYY: Year of implementation dd/mm/yyyy: date of Approval

The Complete CSR number for individual degree would be

CSR/CUBTECH/YYYY/CCC dated (DD/MM/YYYY)

CCC: Degree Code as mentioned in the above Table.

DD/MM/YYYY: date of Approval

2. Eligibility for Admission

- (a) Category-1: For admission into the FIRST YEAR of 4-Year B.Tech. in any stream, the candidates must have passed Class XII Examinations in the system of 10+2 under West Bengal Council of Higher Secondary Education or equivalent Board/Council with Physics, Chemistry, Mathematics securing an average of at least 60% marks (or equivalent grade) in these subjects and allottedby West Bengal JEEBoard.
- **(b)** Category-2: A group of students will be considered through JELET with 4year B.Sc. Honours/3 year B.Sc. or equivalentwith the subjects as specified below:
 - •Chemical Engineering: Chemistry, Physics, Mathematics as combination.
 - •Chemical Technology: Chemistry, Physics, Mathematics as combination.



- •Computer Science and Engineering: Physics/ Computer Science/Mathematics/Statistics
- Electrical Engineering: Physics
- •Electronics and Communication Engineering: Physics/Electronics
- •Information Technology: Computer Science/Physics/Electronics
- •Instrumentation Engineering: Physics
- •Optics & Optoelectronics Engineering: Physics/Electronics
- •Polymer Science and Technology: Chemistry
- •Jute and Fibre Technology: Physics/Chemistry/Mathematics, Textile and Clothing/ B.FAD; Post B.Sc. 2-year PG Diploma in Jute Technology and Management.
- (c) Category-3: A group of students will be considered through JELET with at least 60% aggregate marks obtained in Physics, Chemistry and Mathematics at 10+2 level and Diploma with the subjects as specified below:
 - •Chemical Engineering: Diploma in Chemical Engineering
 - •Chemical Technology: Diploma in Chemical Engineering
 - •Computer Science and Engineering: Diploma in Computer Science & Engineering, Computer Science & Technology, Computer Software Technology, Information Technology, Information Technology & Engineering, Cyber Forensics & Information Security, Geographic Information System & Global Positioning System
 - •Electrical Engineering: Diploma in Electrical & Electronics Engineering, Electrical Engineering, Electrical Engineering (Industrial Control), Electrical Power Systems, Instrumentation & Control Engineering, Renewable Energy
 - •Electronics and Communication Engineering: Diploma in Electrical & Electronics Engineering, Electronics & Communication Engineering, Electronics & Instrumentation Engineering, Electronics & Telecommunication Engineering
 - •Information Technology: Diploma in Computer Science & Engineering, Computer Science & Technology, Computer Software Technology, Information Technology, Information Technology & Engineering, Cyber Forensics & Information Security, Geographic Information System & Global Positioning System
 - •Instrumentation Engineering: Diploma in Electronics and Instrumentation, Instrumentation and control, Electrical and electronics, Mechatronics
 - •Optics and Optoelectronics Engineering: Diploma in Electrical & Electronics Engineering, Electronics & Communication Engineering, Electronics & Instrumentation Engineering, Electronics & Telecommunication Engineering, Photography
 - •Polymer Science and Technology: Diploma in Chemical Engineering
 - •Jute and Fibre Technology: Diploma in Mechanical Engineering/ Electrical Engineering/ Chemical Engineering/ Computer Engineering/Ceramic Engineering / Electronics/ Textile Technology/ Handloom Technology/ Apparel and Fashion Technology
- (d) Admission Matrix is given in TABLE-2 for Categories-'1', '2' and '3'.

TABLE-2

| Courses | Admission in the | | the | Admission in 2 nd year (means lateral | | |
|----------------------------|----------------------|-------|------|--|--|--|
| | 1 st year | | | entry) | | |
| ECE, IT, CSE, EE, IE, OOE, | 100% | seats | from | Outstanding Vacant Seats+ Additional | | |
| JFT, CE, CT, PST | Categor | y-1 | | 10% of total seats from Category-2/ | | |
| | | | | Category-3 | | |

(e) The duration of study for 'Category-2/Category-3' students admitted in the 2ndyear will be of 6 Semesters (starting from the 3rdSemester) in three academic years. 'Workshop' and 'Engineering Drawing' will be treated as non-credit mandatory courses, to be cleared by a student before the commencement of his/her 7th Semester classes. The evaluation will be reflected on the 6th Semester mark sheet as "He/she has qualified 'Workshop and Engineering Drawing' courses."



(f) Domicile Policy

The State (West Bengal) Residential / Domicile requirement is applicable for admission to the above mentioned courses. 80% of the unreservedseats are earmarked for West Bengal domicile candidates. The candidate shall have to furnish valid Domicile Certificate in the proforma in his/her name issued by the competent authority, as notified by the University of Calcutta during admission process. If the certificate is found to be invalid, the candidate will lose the opportunity of admission.

(g) Guideline for Foreign National/ INTERNATIONAL Candidate

- (i) For Foreign National/ International Students 15% additional supernumerary seat (15% of the total seats) is earmarked.
- (ii) Foreign student may apply either through email along with his/ her all previous mark sheets, certificates and syllabus of the Higher Secondary/ 10+2/ equivalent examinations to the respective HoD or they may also apply through the admission portal as usual for national students. Concerned HoD after preliminary verification of the academic records would request the Secretary, UCSTA to call an Interview on virtual/physical mode.
- (iii) If the candidate qualified in interview, the equivalency certificate has to be collected from C.U. Registrar office by the office of the Secretary, UCSTA. After getting equivalency clearance, concern department will send provisional list of selected candidates for approval of the Vice-Chancellor, C.U.
- (iv) With the approval of the Vice Chancellor, a provisional selection letter may be issued by the Secretary, UCSTAto the candidate, mentioning the list of documents required before admission.
- (v) All types of Foreign National Candidates must produce the following documents in original at the time of admission failing which the provisional selection / admission may be cancelled:
 - a) Permission of Ministry of Human Resources Development (MHRD)
 - b) Valid foreign passport
 - c) Financial undertaking
 - d) Migration/Transfer Certificate
 - e) Medical Fitness Certificate
 - f) Prior security clearance from Ministry of Home Affairs
 - g) Student Visa mentioning the specific course and university
 - h) Attestation of all educational documents by Indian High Commission
 - i) Any other document(s), if any required, by the authority at the time of admission
 - j) FRRO endorsement

(vi)For foreign/International student Tuition Fee will be \$500.00 or equivalent INR per semester for all courses. All other fees will be as like Indian Students.

(vii)Foreign/International candidate should communicate in the following email: cuinternationalcandidate@gmail.com

(h) Guidelines of Change of Stream / Branch

- (i) The facility for change of stream / branch will be available only to students admitted in the 1st year of the 4yr.B.Tech.
- (ii) Maximum number of students permitted to change of branch shall be 25% of the studentsenrolled in the first year in the respective branch(s), subject to the strength of the class notdecreasing below 75% of enrolled students and also not below 50% of intake approved bythe AICTE. After branch change the intake must not be more than approved AICTE intakeincluding thefeewaiverseats.
- (iii) Change of stream / branch will be accorded singly and strictly on the basis of merit list ofaspiringstudentspreparedusingthemarks obtained by the student in the 1st and 2nd semester examinations taken together in the form of YGPA of first year. In case of any tie in the merit list, the relative merit list considering total scores in Theoretical papers on Physics, Chemistry and Mathematics will be used astiebreaker.
- (iv) Change in stream / branch to eligible and interested students will be irrespective of his / herrank(in WBJEE) atthetimeofadmission.
- (v) Eligible students desirous of opting change of stream / branch will be required to apply forthe same in prescribed format, to the office of the Secretary (UCSTA) at Science College, Rajabazar Campus, Kolkata 700009 or Technology Campus, SaltLake City, Kolkata 700106, as applicable.
- (vi) For eligible candidates, the chronology of students' choice as requested in the application will be



strictly adhered to. In case all options sought by a student in order of preference getexhausted, the change of branchwill not be allotted to him /her.

(vii) Anoptiononceacceptedwillbefinal,andcan'tbechangedlater.

(viii) Eligibility

- **a)** The student must be abonafide regular student of the University, has completed registration and necessary formalities as stipulated by the University.
- **b)** The student hasappearedinandclearedeach paperofthe 1st and 2nd Semester courses.
- c) The students with 7 YGPA and 60% marks in aggregate for Physics, Mathematics, Chemistry combinations in (10+2) level are eligible for stream change.
- 3. Credit distribution: The credit distribution among different topics of the entire program should be as detailed in TABLE-3 and each program will have to adopt its own credits against topic from the specified credit range.

TABLE-3

| Sl. | Topics | Credit F | Range for |
|-----|--|-----------------|--------------------|
| No. | | Category1 | Category 2&3 |
| 1 | Humanities and Social Sciences including Management Courses (HSMC) | 10-12 | 6-8 |
| 2 | Basic Sciences Courses (BSC) | 22-24 | 4-8 |
| 3 | Engineering Science Courses (ESC) including workshop, drawing, basics of electrical/mechanical/computer etc. | 22-24 | * |
| 4 | Professional Core Courses (PCC) | 70-74 | 70-74 |
| 5 | Professional Electives Courses (PEC) relevant to chosen specialization/branch | 12-14 | 12-14 |
| 6 | Open Elective Courses (OEC) from other technical and/or emerging subjects or MOOCs | 12-14 | 12-14 |
| 7 | Project work, general viva-voce, seminarand internship in industries or elsewhere | 12-16 | 12-16 |
| 8 | Mandatory Courses (MC) | Non-credit (NC) | Non-credit (NC) |
| | Total | 160-178 | 116-134 |

^{*}For Category-2 students, 'Workshop' and 'Engineering Drawing' will be treated as MC to be cleared by a student before the commencement of his/her 7th Semester classes.

Nature of papers i.e., courses in the curriculum:

- (a) A student has to choose2-4coursesfrom the list of Humanities and Social Sciences including Management courses (HSMC), 4-6 courses from the list of Professional Elective Courses (PEC) and 4-6 courses from the list of Open Elective Courses (OEC).
- (b) A student musttakeminimum 2 Mandatory Courses (MC). Mandatory Courses (MC) will have to be chosen from the topics such as Environmental Sciences, Indian Constitution, Essence of Indian Knowledge Tradition, Induction Training, Auto-CAD including attendance/participation in seminars/workshops (each of minimum of 12 contact hours). The MCs are of Non-credit (NC) in nature. MC will be audited through viva-voce or related records, or certificates as clarified in clause6(ix).

4. Additional/Optional 'Degrees'

(a) B.Tech. Degree with Honours

A student will be eligible to obtain B.Techdegree with Honours if he/she can secure an additional 20 credits (3rd Semester onwards) as per the curriculum of the concerned courses. These 20 credits have to be obtained by successfully completing the offered courses (from CU departments only) and/or through MOOC/ SWAYAM. The student has to apply to the concerned HoD by his/ her willingness to take a particular course, irrespective of online or offline, and get the endorsement before starting the course, failing which the credits for that course will not be considered valid. The student will have to produce the requisite certificates in support of 20 credits after successful completion of the courses. The concerned HoD would forward the requisite marks/credits or documents to the



Controller of Examinations for the purpose of its reflections on the mark sheets/grade cards and/or certificate.

(b) B. Tech. with Minor Degree

With a view to enhance the employability skills and impart deep knowledge in emerging areas in any programme, the corresponding department may offer B.Tech. with Minor Degree. The student will have to earn additional 18 credits (5th Semester onwards) and related curriculum will be available in the CSR of the concerned department, which may contain courses through MOOC/ SWAYAM. The student has to apply to the concerned HoD by his/ her willingness to take a particular course, irrespective of online or offline, and get the endorsement before starting the course, failing which the credits for that course will not be considered valid. The concerned HoD would forward the requisite marks/credits or documents to the Controller of Examinations for the purpose of its reflections on the mark sheets/grade cards and/or certificate.

5. Credit-Based Evaluation

(a) The credit-based examination system will be followed for all Semester examinations. Each curriculum will have a certain number of credits assigned to it depending upon the academic load of the curriculum assessed on the basis of *weekly contact hours* of lecture, tutorial and laboratory classes, assignments or field study and/or self-study.

Generally, each curriculum shall have an integer number of credits reflecting its weight. The number of credits in a semester shall ordinarily be calculated as under

- (i) Lecture (L)/Tutorial (T): For each theory course, one lecture hour per week shall normally be equivalent to one credit. One hour of tutorial per week shall be equivalent to one credit. For determining the credits of a theory course, both lectures and tutorials should be added.
- (ii) Practical (P): For each laboratory course, one hour shall be equivalent to 0.5 credit.

The credits for each course shall be defined in L-T-P format. For example, 2-1-0 will mean that it is a lecture-based course and has 2 lectures, 1 tutorial, and no practical assigned to it. Similarly, a course with 0-0-3 means that it is a practical course with 3 hours of practical work.

In general, the 4-year curriculum (for Category-1) in any field of study will have subjects covering a minimum of 160 credits. However, for lateral entry (i.e. for Category-2 and Category-3), the 3-year curriculum in any field of study will have subjects covering a minimum of 116 credits. The minimum credits will be mentioned in the curricular structure with detailed syllabus for the respective curriculum.

Each theoretical course or paper will be evaluated over a total of 100 marks bearing two distinct components: (i) Internal Assessment (IA) 30% i.e., 30 marks (ii) End-Semester examination (ESE) 70% i.e., 70 marks. Each Lab/practical course or paper will be evaluated over a total of 50 marks (1.5 credits).

Final year project work will divided into Project Phase – I (in 7th semester) having 100 marks with 3credit andProject Phase – II (in 8th semester) having 200 marks with 6credit.

The general viva-voce will be conducted during the End semester examination of 8th semester and will be evaluated for 100 marks with 3credit.

A student has to appear for a departmental seminar on chosen topic during the End semester examination of 8th semesterand will be evaluated for 100 marks with 1.5credit.

A student has to take at least one internship in industries or elsewhere, 5th semester onwards, and will be evaluated for 100 marks with 1.5credit.

(b) The components of "Internal Assessment" (IA) of theory papers are given in TABLE-4.

TARLE_4

| TIBEL I | |
|---|-------|
| Type of evaluation | Marks |
| Sessional Assessments through Class Test/ Assignments | 20 |
| Assessment based on class and academic performances | 10 |

The components for the evaluation of Laboratory/ practical papers are given in TABLE-5.

| | | DТ | • | _ |
|----|---|----|-------|----|
| Т. | А | КI | , H)= | _^ |

| Type of evaluation | Marks |
|--------------------|-------|



| Continuous Assessment | 70% |
|--|-----|
| End-Semester evaluation (Report/Presentation/ Viva-voce) | 30% |

(c) Promotion to next Semester and discontinuation from the curriculum

- (i) A student admitted in 1st Semester of B.Tech. curriculum(i.e. Category-1)will get total 6 consecutive academic years from his year of admission to pass all the 8 semesters. A student admitted in 3rdSemester of B.Tech. curriculum(i.e. Category-2 and Category-3) will get total 5 consecutive academic years from his year of admission to pass all the 6 semesters.
- (ii) A student has to secure at least 50% marks (i.e., Grade-D) in each course/paper in order to *pass the* paper.
- (iii) To pass a paper, a student will be given a maximum of three chances as given below:
 - a) regular examination,
 - **b)** supplementary examination, to be conducted within 45 days from the date of publication of end semester result, and
 - c) back-paper clearing examination along with a regular end-semester examination.

The student will have to be discontinued from the curriculum as 'Disqualified' candidate, if he/she fails to clear a course/ paper with these three chances.

- (iv) A regular examination embodies internal assessment (continuous teacher's assessment along with mid-semester examination) and end-semester examination. For supplementary and back-paper clearing examinations, the internal assessment of a candidate will be carried forward.
- (v) A student, who fails to earn 50% marks or remains absent in the end semester examination of one or more paper(s), needs to appear in supplementary examination(s) for those courses / papers. If he still fails to clear the paper(s) or remains absent in supplementary examination(s), he will have to clear those paper(s) in the following yearalong with the regular candidates.
- (vi) A student has to clear 50% of the allotted creditsin 1st year (including supplementary examinations, if necessary) to enable him/her to get promoted to the 2nd year, failing which a student repeats the 1st year for the subjects with grade F. Even after repeating the 1st year, if the student is unable to clear the required credits, the student will have to be discontinued from the curriculum as 'Disqualified' candidate.
- (vii) To get promoted to the 5thSemester (at the end of 2nd year), a student will have to pass all the 1st year papers. In addition, he/she will have to earn 50% of the allotted credits for the 2nd year, failing which the student will have to repeat those 2nd year subjects with grade F.Even after repeating the 2nd year, if the student is unable to clear the required credits, the student will have to be discontinued from the curriculum as 'Disqualified' candidate.
- (viii) Similarly, to get promoted to the 7thSemester (at the end of 3rd year), a student will have to pass all the 2nd year papers. In addition, he/she will have to earn 50% of the allotted credits for the 3rd year, failing which the student repeats the 3rd year subjects with grade F. Even after repeating the 3rdyear, if the student is unable to clear the required credits, the student will have to be discontinued from the curriculum as 'Disqualified' candidate.
- (ix) Non-credit (NC): For the NC courses/papers, the students only need to pass that paper, however no grade will be awarded. To pass the non-credit paper, a student has to obtain either 50 marks or above or QUALIFIED(Q) through an evaluation process to be decided by the concerned department. In the Mark/Grade-Sheet, only QUALIFIED(Q)/ FAIL (F) will be mentioned against that paper. In case of FAIL(F), the student has to be re-evaluated as per clause 5c(v).
- (x) For appearing at any supplementary Examination the interested candidates have to submit application to the Faculty Secretary through concerned HOD within ten (10) working days from the date of publication of the result of the concerned End Semester Examination.
- (xi) If a student fails to clear all the required credits for the successful completion of B.Tech degree within the stipulated time frame (as per his/her Category), he/ she may apply for the readmission in same stream / branch of the 1st semester of the next academic session along with fresh applicants. This type of readmission shall be treated as super numeric to the approved number of seats for that stream/ branch with a recommendation from the concerned Departmental Committee and subject the approval of the Hon'ble Vice Chancellor.

In brief: In order to obtain the B.Tech. degree of the University, a student will (i) get a maximum of 3 chances to clear a course/paper; (ii) get a maximum of 'two year repeats' in the entire duration of the study; (iii) have to earn a minimum of 50% of the allotted credits in each year.



6. Examination/Evaluation/Eligibility

- (a) In case of offering optional papers (PEC/OEC) in a particular semester, the Board of Studies (BOS) of the respective curriculum should announce the list of the papers to be offered at the commencement of that semester.
- (b) A student must attain 75% of attendance in total in the theoretical as well as in laboratory/ practical classes in order to appear at a semester examination.
- (c) Each theory and practical paper will be evaluated by internal examiner(s). Project and General Viva Voce examinations will be assessed by a board consisting of at least two (2) internal examiners and at least one (1) external examiner. A teacher who undertakes a course or a permanent teaching faculty in the department will act as 'internal examiner'.
- (d) The end-semester result will be published within 4-5 weeks after the end-semester examination is over. The supplementary examinations need to be conducted within 5-6 weeks from the declaration of the results of that semester.
- (e) A candidate who has not been eligible to appear at any end semester examination in terms of clause 6(b) has to take admission to the concerned semester examination by paying semester and other related fees, for which he/she has been ineligible under clause 6(b) in the very next available chance.

(f) Absent criteria

- i) Failure to fill up the examination form shall be considered as missing a chance and such candidates who have not filled up the examination form shall have to appear at the same semester examination.
- ii) A Candidate who has filled up the examination form but remains absent in the entire examination or more than 50% of courses will be considered to have a lost chance and shall be required to reappear at the same semester examination.
- iii) A Candidate remaining absent in one or two papers/courses but clearing the other papers/courses shall be considered to have failed in those papers/courses in which he remains absent and shall be eligible to clear those as stated in 5(c).

(g) Guidelines for Re-Examination:

Candidates seeking re-examination or review may apply to the University in a prescribed form along with requisite fees within seven (7) working days from the date of issue of Grade Card subject to the following conditions:

- i) Application for review shall be restricted to theoretical courses/papers only.
- ii) A candidate will be eligible to re-examine his/her script if he/she appeared the said semester of examination as a whole but not appeared as supplementary candidate i.e. any candidate who appear some courses (but not all courses) of the concerned semester of examinations will not be eligible to re-examine his/her scripts.
- iii) Maximum 50% number of the theoretical courses/papers in any semester examination may be reexamined on request by the examinee subject to the condition that he/ she secures a minimum of 50% marks in the rest of theoretical courses/papers in that semester. In case of a semester having only one theoretical course/paper, re-examination will not be permitted.
- iv) In re-examination of course(s)/paper(s) for any semester of B.Tech Examinations, the marks awarded by the re-examiner in that particular course/paper will be taken as the final marks obtained by the examinee in that course/paper.
- v) On re-examination of a course/paper the marks may get enhanced or reduced than that awarded by the original examiner.
- vi) The re-examiner(s) shall be chosen by the BoS of the concerned Department other than the original examiner(s) of that particular course/paper.

7. Eligibility for a Degree

A student needs to pass in all the theoretical and practical papers to qualify for the B.Tech. Degree.

- (i) 'Category-1' student has to pass all the theoretical and practical papers of 8-Semesters in maximum of 6 year periods from admission to obtain B.Tech. degree in the corresponding course.
- (ii) 'Category-2 and Category-3' students have to pass all the theoretical and practical papers of 6-Semesters starting from 3rd Semester in maximum of 5 year periods to obtain the B.Tech. degree in the corresponding course.



8. Marks, Grade, and Percentage

On the basis of total marks (IA+ESE) secured in each paper, Grade (G), Grade Point (GP), and (a) marks obtained in % will be awarded to a student and to be reflected on the Mark/Grade-Sheet. The equivalence between grades, grade points and the percentage marks is given TABLE-6.

TARLE_6

| Grade (G) | Grade Point | Equivalence with | Credit |
|-----------|-------------|-------------------------|----------|
| | (GP) | Percentage (%) of marks | Obtained |
| Ex | 10 | ≥ 90 | Full |
| A | 9 | \geq 80 and \leq 90 | Full |
| В | 8 | \geq 70 and \leq 80 | Full |
| C | 7 | \geq 60 and <70 | Full |
| D | 6 | \geq 50 and \leq 60 | Full |
| F | 0 | < 50 | Zero |

(b) Each paper shall carry Credit (C) according to the number of hours allotted per week and as indicated in TABLE-7.

TABLE-7

| Paper/subject | No. of hours/week | Credit (C) assigned |
|---------------|-------------------|---------------------|
| Theoretical | 1 | 1.0 |
| Tutorial | 1 | 1.0 |
| Practical | 1 | 0.5 |

- The course structure and the credits assigned to each semester of each course are to be provided by (c) the individual department.
- The performance of a candidate in nth Semester examination, who earns all the Credit of that (d) semester, will be assessed by the 'Semester Grade Point Average' (SGPA), 'Sn' to be computed as:

$$SGPA, [S_n] = \frac{\sum_{k} [C_k GP_k]}{\sum_{k} C_k}$$

'k' denotes the number of papers in a particular semester, C_k denotes the credit allotted to k^{th} paper, $\sum_k C_k$ denotes the total credits of particular semester and

denotes the grade point of k^{th} paper.

On completion of the B.Tech. course, the overall performance of a candidate will be assessed by the (e) 'Cumulative Grade Point Average' (CGPA) to be computed as:

$$CGPA = \frac{\sum_{n} [C_{n}S_{n}]}{\sum_{n} C_{n}}$$

where, $C_n = \sum_{k} C_k$ and

 $\sum_{n} C_n$ denotes total credits of all the semesters.

- 9. Candidates appearing in a semester examination shall join classes in the next semester immediately, wherever applicable, after completion of the examination.
- 10. At the end of each Semester examination, a Mark/Grade-Sheetshowing the Semester performance

(Semester Mark/Grade-Sheet) indicated by **SGPA** will be issued to the students. However, SGPA will not be calculated for those candidates who fail to earn all the credits in that Semester. The merit list will be prepared on the basis of the total marks obtained.

11. Mark/Grade-Sheet

A consolidated Mark/Grade-Sheet, showing the overall performance in the B.Tech.course indicated by **CGPA**, will be issued only to those successful students who have passed all the theoretical and practical papers of all of the 8 semesters (for Category-1 students) or 6 semesters (for Category-2 and Category-3students).

The consolidated Mark/Grade-Sheetshall consist of two components. The first component will have the information of the final Semester as follows:

| Paper | Details of Courses | Full Marks | Marks obtained | Credit obtained | Grade | Grade Point | SGPA | Remarks |
|-------|-----------------------|---------------|----------------|-----------------|-------|----------------|------|---------|
| | | | | | | | | |

The second component will have a summaryof all the semesters having the following basic information:

| Semester | Total credit | Credit obtained | SGPA | Full Marks | Marks obtained | Cumulative stater | nent |
|----------|--------------|-----------------|------|---------------|-------------------|--------------------|------|
| | | | | | | Total credit | |
| | | | | | | CGPA | |
| | | | | | | Full marks (Total) | |
| | | | | | | | |
| | | | | | | Marks obtained | |
| | | | | | | Result | # |

The hash (#) in the last row of last column will contain the information regarding the final achievement of the candidate in all the examinations. This box will contain only one (1) of the following three (3) information: I, II and F.

where, I stands for First Class

II stands for Second Class

F stands for Fail

B. Tech. Results will be awarded as per Table-8.

TABLE-8

| CGPA obtained | Result to be awarded |
|------------------------------|----------------------|
| 7.0 and above | First Class |
| 6.0 and above, less than 7.0 | Second Class |
| Less than 5.0 | Fail |

12. The Degree of "Bachelor of Technology" under the seal of the University shall be awarded to a successful candidate mentioning the grade and class he/she has obtained.

13. Final Semester Mark/Grade-Sheet

- (a) The Mark/Grade-Sheet forfinal semester (i.e., Semester 8) should highlight either of the following statements as applicable:
 - "B. Tech. in DDDD"
 - "B. Tech. with Honours in DDDD"
 - "B. Tech. in DDDDwith Minor Degree in BBBB"
 - "B. Tech. with Honours in DDDDwith Minor Degree in BBBB"

DDDD: Degree offered as in TABLE-1.

BBBB: Minor Degree list will be available to the CSR of the concerned Department.



- **(b)** In case of Chemical Technology (Sl. No. 2 in TABLE-1, Degree Code (CCC): 202), the Mark/Grade-Sheet for final semester (i.e., Semester 8) should highlight further specialization either of the following statements as applicable:
 - "B. Tech. in Chemical Technology (XXXX)"
 - "B. Tech. with Honours in Chemical Technology (XXXX)"
 - "B. Tech. with Minor Degree in Chemical Technology (XXXX)"

XXXX: Ceramic Engineering/ Petrochemicals & Petroleum Refinery Engineering/ Pharmaceuticals & Fine Chemicals Technology/ Oil Technology.

- 14. A student or a number of students may be permitted to pursue their 7th and 8th semester courses in a foreign or collaborating/partner University based on a memorandum of understanding (MoU) between CU and that University subject to the following conditions:
 - (i) The collaborating/partner University agrees to offer a set of adequate courses along with project work(s) (meeting the required credits) to be approved by the concerned degree offering department/departmental committee.
- **15.** The Template of Certificates for the B.Tech. Degree, B.Tech.Degree with Honours, B.Tech.Degree with Minor and B.Tech. Degree with Honours and Minor will be as:
 - (a) Certificate for the B.Tech. Degree

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| This is to cert | tify that |
|-------------------------------|----------------------------|
| (Name) obtained the degree of | Four Year (Eight Semester) |
| Bachelor of Technology in | in this University in the |
| year, and was placed in the | Class. |

Vice Chancellor Senate House

The ----- (Date) ----- (Month),---- (Year)

(b) Certificate for B.Tech. Degree with Honours

UNIVERSITY OF CALCUTTA



This is to certify that
-----(Name) obtained the degree of Four Year (Eight Semester)
Bachelor of Technology with Honoursin ------ in this
University in the year ------, and was placed in the ------ Class.



| Vice Chancellor Senate House The (Data) (Month) (Year) | |
|--|------|
| The (Date) (Month), (Year) | |
| c) Certificate for the B.Tech. Degree with Minor | |
| UNIVERSITY OF CALCUTTA | |
| | |
| This is to certify that | |
| (Name) obtained the degree of Four Year (Eight Semester) Bachelor of Technology in | |
| , and | |
| was placed in the Class. | |
| Vice Chancellor Senate House | |
| The (Date) (Month), (Year) | |
| d) Certificate for B.Tech. Degree with Honours and Minor | |
| UNIVERSITY OF CALCUTTA | |
| | |
| This is to certify that(Name) obtained the degree of Four Year (Eight Semester) Bachelor of Technologywith Honours in with | |
| Minor in, and was placed in the Class. | ear, |
| Vice Chancellor Senate House | |
| The (Date) (Month), (Year) | |

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Any matter arising beyond the scope of the above regulation may be referred to the Hon'ble Vice Chancellor for his/her consideration and resolution.

16.