UNIVERSITY OF CALCUTTA

Department of Chemical Technology

Faculty of Engineering & Technology

Regulation for 4-year 8-semester B. Tech. course in Chemical Technology

(with effect from the academic year 2019 – 2020)

1	Department of Chemical Technology, Faculty of Engineering and Technology, University of Calcutta shall provide instructions leading towards the 4-year, 8-semester B. Tech. degree in **Chemical Technology**. The course is of four (4) years duration comprised of eight (8) Semesters, each Semester being of six (6) months' duration.	
2	**Eligibility for Admission**	
	(a)	Category-1: For admission into the FIRST YEAR of 4-Year B. Tech. course in **Chemical Technology**, the candidates must have passed Class XII Examinations in the system of 10+2 under West Bengal Council of Higher Secondary Education or equivalent with Physics, Chemistry, Mathematics securing an average of at least 60% marks (or equivalent grade) in these subjects and **cleared West Bengal JEE.**
	(b)	Category-2: For admission of the B.Sc. (Hons.) qualified students into the SECOND YEAR of B. Tech. course in **Chemical Technology**, the candidates must have passed B.Sc. Honours with Chemistry. The selection will be strictly based on merit as adopted and invoked time to time by University of Calcutta. The 'Category-2' students must have to attend and pass 'Workshop' and 'Engineering Drawing' subjects additionally arranged in the FOURTH Semester curriculum. However, no credit points will be awarded and will not be included for SGPA calculation. In the main mark sheet, mention will be made (at the bottom) that he/she has qualified 'Workshop/Drawing' with grade ----. The course of study for students admitted in the 2nd year will be of 6 Semesters (starting from third Semester) in three academic years.
	(c)	Any seat(s) remaining vacant at the end of Second Semester will be filled up by Category-2 candidates.
3	The award of the said B. Tech. Degrees will be conferred to students who are successful in all of the eight (8) / six (6) Semester examinations.	
4	**Attendance:** A student **must attend 75%** of the theoretical and laboratory/ practical classes **and successfully complete sessional assessment** in order to appear at Semester examinations.	

5 Credit based Evaluation

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

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

(i) Lecture (L)/Tutorial (T): One lecture hour per week shall normally be assigned one credit. One hour of tutorial per week shall be assigned one credit. For determining the credits of a theory course, lectures and tutorials shall be added.

(ii) Practical (P): Three laboratory hours per week shall be assigned two (2) credits. Courses other than Lectures/Tutorials shall be treated as practical courses.

The course credits shall be given as L-T-P. For example, 3-1-0 will mean that it is a lecture based course and has 3 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. Credits will be assigned to seminar, dissertation, project etc. under the practical component.

The 4-year course of study will have subjects covering a total of 180 credits

In general, examinations on theoretical papers will be on 100 marks of 4 Credits, while papers CT301, CT302, CT303, CT403 and CT801 consisting of 2 modules, examination will be on 50 marks for each module having 2 credits per module.

The laboratory/practical papers will carry 50 marks of 2/1.5 Credits.

Credit points of theoretical and practical papers including project work, design, General Viva Voce, plant training, seminar presentation etc. offered by Department are given in Course Structures separately. There will be two components of examinations of theoretical papers: i) Sessional assessment 30% and ii) End Semester examination 70%

(b) **The Sessional assessment components of theory papers are:**

Serial No	Type of evaluation	Marks (100/50)
1	Sessional Assessments through Class Test/ Assignments	25/10
2	Overall conduct, attendance, manners, skills etc.	05

(c) **Evaluation in Laboratory/ practical papers:**

Serial No	Type of evaluation	Marks
1	Report and results	20
2	Viva	20
3	Overall conduct, attendance, discipline, manners, skills etc.	10

(d) **Eligibility of success/failure in a Semester Examination:**

(i) A student admitted in 1st semester of B. Tech. course will get total 6 consecutive academic years from his/her year of admission to pass in all the 8 semesters.

A student admitted in 3rd semester of B. Tech. course will get total 5 consecutive academic years from his/her year of admission to pass in all the 6 semesters.

(ii) A student has to secure at least 50% marks i.e. Grade-D in all subjects individually in order to ***pass the examination.***

(iii) If a student don't secure at least 50% marks or absent in the end semester examination of theory subject needs to appear in that paper in the examination of next academic session(s). In the case of theoretical paper, the marks of Sessional assessment would be retained.

(iv) A student will be eligible to take admission to the next immediate higher semester if the number of non-appeared paper in Theoretical examination does not exceed more than two. A student must have to appear in all the papers of the practical examination of the semester concerned.

(v) If a student does not appear in more than two theoretical papers or any of the practical paper of the semester needs to take readmission in that semester of next academic season.

(vi) A student can appear in current semester and along with that could appear supplementary examination of maximum of 2 previous semesters of the corresponding even or odd semester. (e.g. A students has failed in a paper in 1st semester will get 2 additional chances in 3rd and 5th Semester).

(vii) **Special supplementary examinations** will be arranged only for Semester 7 and 8 just after the declaration of results of 7th and 8th Semester. Students who could not secure 50% marks in Special supplementary examination will have to appear in next academic session. (Provided maximum 6 years span for 4 Year B. Tech. and 5 Years span for 3 Years B. Tech. kept intact).

(viii) **Eligibility for a Degree:** A student needs to pass in all the theoretical and practical papers to qualify for B. Tech. Degree.

'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 corresponding course.

'Category 2' student has to pass all the theoretical and practical papers of 6-Semesters starting from 3rd Semester in maximum of 5 year periods to obtain B. Tech. degree in corresponding course.

(ix) A student failing in any subject should apply to the Secretary, UCSTA through the Head of the Department for appearing at the supplementary examinations within 7 days of the publication of results.

6 (a) On the basis of total marks secured in each paper, **Grade (G)** and **Grade Point (GP)** shall be awarded to a student.

The equivalence between grades, grade points and the percentage marks is given by:

Percentage (%) of marks	**Grade (G)**	**Grade Point (GP)**
≥ 90	Ex	10
89 – 80	A	9
79 - 70	B	8
69 - 60	C	7
59 - 50	D	6
< 50	F	0

(b) Each paper shall carry **Credit (C)** according to the number of hours allotted per week and as indicated in the following table:

Paper/subject	No. of hours/week	Credit (C) assigned
Theoretical	3	4
Tutorial	1	
Practical	3/6	(2/3/4)

(c) The performance of a candidate in n^{th} Semester examination, who earns all the credits of that semester, will be assessed by the '**Semester Grade Point Average' (SGPA), 'S_n'** to be computed as:

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

where 'k' denotes the number of papers in a particular semester and

$\sum_k C_k$ denotes the total credits of a particular semester and

GP_k is the grade point of k^{th} paper.

	(d)	On completion of the B. Tech. course in Chemical Technology, the overall performance of a candidate will be assessed by the '**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, i.e. 180 credits for Category-1 and 137 credits for Category-2.
	(e)	Each theory and each practical paper will be assessed by internal examiner(s). Design, Project, seminar 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.
	(f)	If a candidate is unable to appear at any of the theory or practical examination(s), he/she will earn zero (0) credit in that paper(s).
7	Candidates appearing in a semester examination shall join classes in the next semester immediately, wherever applicable, after completion of the examination.	
8	The Calcutta University Syndicate shall publish a list of successful candidates of the B. Tech. examination for each of the Semester examinations.	
9	At the end of each Semester examination, a Grade-Sheet showing the Semester performance (Semester 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 Semester Grade Sheet should have the following basic information: The merit list will be prepared on the basis of the total marks obtained.	

Course Code	Module	Details of courses	Credits	Course Total		Grade Point	Letter Grade	SGPA	Remarks
				Full Marks	Marks obtained				

10	(a)	A consolidated Grade-Sheet, showing the overall performance in the B. Tech course indicated by **CGPA**, will be issued only to those successful students who have earned 180 credits for Category-1 and 137 credits for Category-2 in the B. Tech. course. The consolidated grade sheet shall consist of two components. The first component will have the information of the final Semester as follows:							

Course Code	Module	Details of courses	Credits	Course Total		Grade Point	Letter Grade	SGPA	Remar
				Full Marks	Marks obtained				

		The second component will have a **summary** of all the semesters having the following basic information: 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: '1st Class' / '2nd Class' / 'Failed'.
	(b)	Candidates securing CGPA at least 7.5 in B. Tech. Examination shall be placed in the First Class and those securing 6.0 or more but less than 7.5 shall be placed in the 'Second Class'. Candidates securing CGPA less than 6.0 shall be declared 'Failed'.
11		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. The format will be as follows: UNIVERSITY OF CALCUTTA LOGO ***It is hereby certified that after satisfying all the conditions prescribed by the University*** **----------*(Name)* was on the ---th day of ----(month), -----(year)** **Duly admitted to the Degree of** ***Bachelor of Technology in* CHEMICAL TECHNOLOGY** ***In the ---- Class*** Vice Chancellor Senate House

Semester	Total credit	Credit obtained	Full marks	Marks obtained	SGPA	Cumulative statement	
8th						Total Credit	
7th						Credit Obtained	
6th						Full Marks	
5th						Grand Total	
4th						CGPA	
3rd						Result	#
2nd						$	
1st							