UNIVERSITY OF CALCUTTA

Faculty of Engineering and Technology

A. Regulations for 2-year 4-semester M. Tech. program

(With effect from the academic year 2024 – 2025)

These regulations provide a 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 M.Tech. degree program for complete CSR of that degree.

1. Degrees Offered

- The Faculty of Engineering and Technology, University of Calcutta shall provide instructions leading towards the 2-year, 4-semester M.Tech. degree program in different **Engineering/ Technology** subjects as mentioned in TABLE–1.
- The mode of instruction for all the programs will be in English only.

TABLE–1

Sl. No.	Degree offered	Degree Code (CCC)
1	M.Tech in Radio Physics and Electronics (RPE) Specializations (SSSS): • Space Science and Microwaves • Nanoelectronics and Photonics	101
2	M. Tech in VLSI Design Section A (VLSI)*: Regular Students Section B (VLSI-WP)*: Working Professionals.	Section A: 102 Section B: 103
3	Computer Sc. & Engineering (CSE)	104
4	Information Technology (IT)*	105
5	Computer Engineering & Application (CEA-WP)*	106
6	M.Tech in Electrical Engineering Specializations (SSSS): • Smart Grid Systems • Control and Robotics Section A (EE): Regular Students Section B (EE-WP)*: Working Professionals.	Section A: 107 Section B: 108
7	M.Tech in Instrumentation and Control Engineering Section A (ICE): Regular Mode Section B (ICE-WP)*: Working Professionals.	Section A: 109 Section B: 110
8	M.Tech in Optics and Optoelectronics (OO)	111
9	M.Tech in Biomedical Instrumentation (BMI)*	112
10	M.Tech in Chemical Engineering (CE)	113
11	M.Tech in Polymer Science & Technology (PST)	114
12	M.Tech in Ceramic Engineering (CR)	115
13	M.Tech in Oil Technology (OT)	116
14	M.Tech in Petrochemical & Petroleum Refinery Engineering (PE)	117
15	M.Tech in Pharmaceutical Technology (PT)	118
16	M. Tech. Course in Textile Technology (Technical Textiles) (TT)	119

*** Self Financed Course**

WP-Working Professionals

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

duration.

2. Eligibility for Admission

General eligibility criterion:

i) B.Tech / B.E./M.Sc./ MCA / AMIE Degree from any UGC/ AICTE recognized University/ Institute or equivalent.

ii) No age bar.

iii) At least First class or its equivalent grade in B.Tech/ B.E./M.Sc./MCA/AMIE level. Relaxation for the reserved category students will be as per AICTE/UGC rule.

(a) The eligibility for admission to the 2-Year 4-Semester M.Tech.in Radio Physics and Electronics (RPE) with specializations in (i) Space Science and Microwaves, or (ii) Nanoelectronics and Photonicsprogram will be as specified below:

i) B.Tech / B.E./ AMIE/equivalent degree in Electronics & Communication Engineering / Radio physics & Electronics / Electronics & Communication / Electronics & Telecommunication Engg. / Instrumentation Engg. / Electronics & Instrumentation Engg. / Optics & Optoelectronics from recognized University.

ii) M.Sc. degree in Electronic Science (with Physics and Mathematics as subjects at the B. Sc. level) /Physics.

iii) M.Sc. degree in Physics (specialization in Electronics)

(b) The eligibility for admission to the 2-Year 4-Semester M.Tech. in VLSI Design (VLSI and VLSI-WP) program will be as specified below:

i) B.Tech / B.E./ AMIE/equivalent degree in Electronics & Communication Engineering / Radio physics & Electronics / Electronics & Communication / Electronics & Telecommunication Engg. / Instrumentation Engg. / Electronics & Instrumentation Engg. / Computer Sc. & Engg./ Information Technology

ii) M.Sc. degree in Electronic Science with Physics and Mathematics as subjects at the UG level / Computer Science with Physics & Mathematics as subjects at UG level / Physics (specialization in Electronics).

iii) MCA degree with Physics and Mathematics at undergraduate level.

(c) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Computer Sc. & Engg. (CSE) program will be as specified below:

i)B.E./ B. Tech. Degree in Computer Science & Engg / Computer Science & Technology / Computer Science / Information Technology / Any equivalent degree

ii) M.Sc. Degree in Computer Science / Computer & Information Science (with B.Sc. Honours in Computer Science) from C.U./ Computer Science / Computer & Information Science (with B.Sc. Honours in Computer Science) from another university with valid GATE qualified scorefrom any UGC / AICTE recognized University / Institute or equivalent.

(d) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Information Technology (IT)program will be as specified below:

i) B.E./ B. Tech. Degree in: Information Technology/ Computer Science & Engineering/ Data Science / CSBS /AI / ML / Block chain / IoT / Embedded Systems / Cyber Security or equivalent.

ii) M.Sc. in Computer Science / Computer & Information Science with B.Sc.(Hons.) in Computer Science.

iii) M.C.A. with B.Sc. Honours in Computer Science / Physics / Mathematics / Electronics / Statistics from any UGC / AICTE recognized University / Institute or equivalent

iv) MCA with Computer Application (major) from University of Calcutta.

Additional Criteria:

i) All the candidates should have mathematics as one of the subject at UG level and at least 60% marks in Mathematics at (10+2) level

ii) Candidate with BCA at Graduation level is not eligible.

(e) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Computer Engineering & Application (CEA-WP) program will be as specified below:

i) Any Engineering Graduate

ii) MCA with Mathematics as one of the subject at B.Sc (Hons.) level

iii) MCA with BCA at the undergraduate level with 60% marks each in Mathematics and Physics in (10+2) level

iv) Master Degree holder in Science with Mathematics as one of the subject at B.Sc. (Hons.) level

or any equivalent degree from any UGC approved University / AICTE recognized institute is eligible to apply for admission in the said courses.

(f) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Electrical Engineering (EE and EE-WP) with Specializations in (i) Smart Grid Systems, or (ii) Control and Robotics program will be as specified below:

i) For Smart Grid Systems: B.Tech / B.E./ AMIE/equivalent degree in Electrical Engineering / Power Engineering/ Electrical & Electronics Engineering.

ii) For Control and Robotics: B.Tech / B.E./ AMIE/equivalent degree in Electrical Engineering/ Electrical & Electronics Engineering/Instrumentation Engineering or its equivalent/ Electronics and Communication Engineering or its equivalent/ Robotics Engineering or its equivalent/ Control Engineering or its equivalent.

(g) The eligibility for admission to the 2-Year 4-Semester M.Tech. inInstrumentation and Control Engineering (ICE and ICE-WP) program will be as specified below:

B.Tech / B.E./ AMIE/equivalent degree in Instrumentation Engineering/ Instrumentation & Control Engineering/ Applied Electronics & Instrumentation Engineering/ Electronics & Instrumentation Engineering/ Instrumentation & Electronics Engineering/ Electronics & Electrical Engineering/ Electrical & Electronics Engineering/ Electronics & Communication Engineering/ Electronics & Telecommunication Engineering/ Electronics Engineering/ Biomedical Engineering.

(h) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Optics and Optoelectronics (OO) program will be as specified below:

i) B.Tech in Optics & Optoelectronics Engg/Electronics & Communication Engg/ Electronics & Instrumentation Engg/ Electrical and Electronics Engg/Instrumentation Engg OR equivalent degree from any Institute/University recognized by AICTE/UGC

ii) M.Sc. in Physics/ Electronics/Photonics OR equivalent from any Institute/ University recognized by AICTE/UGC

(i) The eligibility for admission to the 2-Year 4-Semester M.Tech.in Biomedical Instrumentation (BMI) program will be as specified below:

i) B.Tech in Biomedical Instrumentation Engg/ Optics & Optoelectronics Engg/Electronics & Communication Engg/ Electronics & Instrumentation Engg/ Electrical and Electronics Engg/Instrumentation Engg/Biomedical Engg OR equivalent degree from any Institute/University recognized by AICTE/UGC

ii) M.Sc. in Physics/ Electronics/Photonics/Biomedical Instrumentation OR equivalent from any Institute/ University recognized by AICTE/UGC

(j) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Chemical Engineering (CE) program will be as specified below:

B.E./ B. Tech. Degree in Chemical Engineering or equivalent degree from other Universities, IIT's & NIT's dulyapproved by the AICTE.

(k) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Polymer Science & Technology (PST)program will be as specified below:

i) B.E./ B. Tech. Degree in Polymer Science and Technology / Polymer Engineering & Technology / Polymer Science & Rubber Technology / Polymer & Surface Engineering / Paint Technology / Material Science / Material Engg. / Chemical Engg. / Chemical Technology with specialization in Ceramic Engineering/ Oil Technology/ Petroleum Refinery Engineering/ Pharmaceuticals & Fine Chemicals Technology / Jute & Fibre Technology /

ii) M.Sc. in Polymer Science / Polymer Chemistry / Applied Chemistry / Material Science.

(l) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Ceramic Engineering (CR) program will be as

specified below:

i) B.Tech. in Chemical Technology in Ceramic Engg. of Calcutta University

ii) BE/B.Tech. in Ceramic Technology/ Material Sc. & Tech. from any recognized Univ./AICTE recognized Institution equivalent to C.U. B.Tech. in Chemical Technology (Ceramic Engineering).

(m) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Oil Technology (OT)program will be as specified below:

i) B.Tech. in Chemical Technology in Oil Technology of Calcutta University

ii) BE/B.Tech. degree in Oil Technology / Food Technology from any recognized Univ./AICTE recognized Institution or its equivalent to C.U. B.Tech. in Chemical Technology (Oil Tech).

(n) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Petrochemical & Petroleum Refinery Engineering (PE) program will be as specified below:

i) B.Tech. in Chemical Technology in Petrochemical & Petroleum Refinery Engg. of Calcutta University

ii) BE/B.Tech. degree in Chemical Technology from any recognized University /AICTE recognized Institution or its equivalent to C.U. B.Tech. in Chemical Technology (Petrochemical & Petroleum Refinery Engineering).

(o) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Pharmaceutical Technology (PT) program will be as specified below:

i) B.Tech. in Chemical Technology in Pharmaceutical & Fine Chemical Tech. of Calcutta University

ii) B.E./B.Tech./B.Pharm. degree from any recognized Univ./AICTE recognized Institution or its equivalent to C.U. B.Tech. in Chemical Technology (Pharmaceutical & Fine Chemical Technology).

(p) The eligibility for admission to the 2-Year 4-Semester M.Tech. in Textile Technology (Technical Textiles) (TT) program will be as specified below:

i) B.Tech. in Jute & Fibre Technology of University of Calcutta.

ii) M.Sc. in Textile and Clothing.

iii) B.Des (with specialization in Textile and Clothing / Textile Design etc.)

iv) Degree from other Universities, IIT's & NIT's duly approved by the AICTE equivalent to B.Tech in JFT of C.U.

3. Admission

(a)Admission to a program will be based on marks/grades obtained in the Examinations of the last Degrees along with a suitable admission test, to be decided by the Board of PG Studies in respective program/University of Calcutta, conducted amongst the candidates possessing eligibility qualifications and short-listed for such test.

Candidates applying for Section B must be employed or working in a Sponsored Research Project during the time of admission. Candidate cannot be enrolled in any other full-time academic program. Preference will be given to candidates working in program related fields. Candidates must submit relevant valid Certificates from their Employers/Principal Investigators in case of Sponsored Research Project.

(b) Relaxation of cut-of marks in General Eligibility of reserve category candidates will be as per admission rule of University of Calcutta.

(c) Guideline for Foreign National/ INTERNATIONAL Candidate

For the Foreign Nationals, one needs to consult the admission guidelines published on the University of Calcutta website: www.caluniv.ac.in

4. Courses of the Program

The M.Tech. academic program will generally have the following components. However, a few program specific components may be added and that will get reflected in the program specific course structure:

i) Theory/Laboratory based papers/courses comprising of Lectures (L), Tutorials (T) and Practical (P).

ii) Sessional Lab/Mini Project with Seminar.

iii) Term paper leading towards Thesis (Research Methodology and Literature Review)

iii) Dissertation/ Thesis, Phase-I: Foundation and Phase-II: Final.
iv) General Viva Voce.
The course structure of each semester of each program is to be provided by the individual department.

5. Credits of the Program and Class Hours of a Course/Paper

Each course will have a certain number of credits assigned to it depending upon the academic load of the program assessed on the basis of *weekly contact hours* of lecture, tutorial and laboratory classes, assignments or field study.

a) Generally, each course shall have an integer number of credits reflecting its weight. The number of credits in a semester shall ordinarily be calculated as described below and also given in TABLE-4.

i) **Lecture (L):** For each theory course, one lecture hour per week shall normally be equivalent to one credit.

ii) **Tutorial (T):** One hour of tutorial per week shall be equivalent to one credit.

iii) **Practical (P):** For each laboratory course, three hours shall be equivalent to two credits.

For determining the credits of a theory course, both lectures and tutorials should be added.
For determining the credits of a practical course, both tutorials and practical should be added.
The credits for each course/paper shall be defined in L-T-P format as given in TABLE-3. 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 0-0-4 means that it is a practical course with 4 hours of practical work.

TABLE–3

	Hrs./week	**Credits assigned**
Lectures (L)	1	1
Tutorials (T)	1	1
Practical (P)	4	2

b) The Total Credits of a M.Tech. program will be 80. The Year/ Semester-wise distribution of credits will be as follows.

TABLE–4

Year	Total Credits of the Year
First Year (Semester I and Semester II)	40
Second Year (Third and Fourth Semester)	40
Total =	80

6. Credit-Based Evaluation

(a) A student will be evaluated with the end semester examinations.
(b) A student earns the credits assigned to a course/ paper when he/she satisfies the performance criteria as shown in Table-5.
(c) Each theoretical course/paper will be evaluated over a total of 100 marks bearing two distinct components: (i) Internal Assessment (IA) of 30 marks (ii) End-Semester Examination (ESE) of 70 marks. Each Lab/Practical course/paper will be evaluated over a total of 100 marks. The Internal Assessment may be done through class-test(s)/assignment(s)/flipped-classroom technique etc.
(d) The End-Semester Examination of 70 marks will be of 3 hours duration.
(e) Evaluation of practical course/paper will be based on sessional work/continuous assessmentsas well as with end-semester examination. The continuous assessment marks will be of 60 and end examination marks will be of 40 out of total 100 marks of that course/ paper.
(f) A student has to submit a report on Mini Project through the respective Supervisor (s) and defend the same in a Seminar.
(g) For Dissertation Phase-I and Dissertation Phase -II examinations, a student has to submit a Foundation Report and a complete report respectively through the respective Supervisor(s), and defend the same through presentation at the end semesterexaminations.In general, the complete report of Dissertation Phase -II should contain both Dissertation Phase -I and Dissertation Phase -II report.

(h) For Dissertation Phase -I and Dissertation Phase -II, 50% of the notional full marks will be set aside for the Sessional Work/continuous assessment (overall performance of a candidate in identifying the problem based on literature survey, formulation of the problem, proposal of solutions, reporting of these in the Foundation Report) and 50% for the Dissertation Phase-I report and Viva Voce examination.

(i) The practical course/paper and papers of Mini project, dissertation phase-I and Dissertation phase-II will be evaluated by a board of examiners consisting of internal faculty member(s) and/or external examiner(s), as recommended by the Board of Post Graduate Studies of the concerned Department.

(j) For Dissertation Phase – II, if the performance of the student is found unsatisfactory, he/she may be advised reappear before the examination board once again within the next 8 weeks for final evaluation.

7. Marks, Grades and Percentages

(a) The performance of a student in a Course/Paper, Mini Project, Dissertation Phase-I and Phase-II and General Viva Voce will be evaluated in terms of "Grades" and "Grade Points" earned by the student. The equivalence between "Grade", "Grade Point" and the "Percent Marks" (out of notional full marks) is tabulated below.

TABLE–5

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

Grade "F" implies failure to earn the corresponding credits. Grades higher than "F" and GP ≥ 6 indicate successful clearing of a unit that will earn the student the corresponding Grade Point (P) and the Credits (C) assigned to that unit.

(b) The performance of a candidate in n^{th} semester examination, who earns all the Credit 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/courses 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

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

The course structure and the credits assigned to each semester of each program are to be provided by the individual department.

(c) On completion of a M.Tech. program, 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., 80.

8. Guidelines for Appearance in End Semester Examination

(a) To be able to apply to appear in an End Semester Examination, a candidate shall have to pursue a regular course of studies in the Semester and attend at least 75% of the total Theoretical (including Tutorials) and total Practical classes separately in the Semester. Failing to comply within the 75% attendance, the candidate will have to take admission in the same semester in the next academic session by paying the semester dues as applicable.

(b) In case of offering elective papers in a particular semester, the Board of PG Studies (PGBOS) of the respective program should announce the list of the papers to be offered at the commencement of that semester.

(c) For the Mini Project and Dissertation Phase-I and Phase-II, a certificate of satisfactory attendance need to be obtained from the Supervisor(s) prior to the form fill up for the End Semester Examination.

(d) A candidate who fails to earn the total credits of a semester in the first appearance in the End Semester Examination (Semesters I & II), but gets promoted to the next Semester by virtue of satisfying the clause 10(b), will not be required to attend classes in the "back" course(s)/paper(s).

9. Guidelines for Allocation and Evaluation of Mini Project and Dissertation Phase I and Phase-II.

(a) Each student will be allotted the topic of the Mini Project at the beginning of the 2nd Semester and Dissertation at the beginning of the 3rd Semester of the program.

(b) He/She will have to carry out the Mini Project under the supervision of one faculty member of the department/joint supervision of more than one faculty member of the Department.

(c) He/She will have to carry out the Dissertation work for Phase-I and Phase-II under the supervision of a faculty member of the Department or the joint supervision of more than one faculty member of the Department or the joint supervision of one or more faculty member of the Department and an External Supervisor, who is a faculty member/Scientist/Technologist of another academic institution/R&D organization/relevant industry/sister department of the University of Calcutta. The names of the joint supervisors in the case of Dissertation work of a student will have to be approved by the Board of Post Graduate Studies in the specific M.Tech. program.

(d) The Mini Project and Dissertation Phase-I and Dissertation Phase-I course/paper will be evaluated bearing two distinct components: (i) Continuous Assessment of 70% of total marks and (ii) End-Semester evaluation (Report/Presentation/ Viva-voce) of 30% of total marks. A student should comply with the standard plagiarism rule (as per UGC/ AICTE guideline) while submitting the Project/ Dissertation report.

10. Guidelines for Promotion to the Next Semester and Discontinuation from the program

(a) A student admitted in 1st Semester of M.Tech. program will get maximum 4 consecutive academic years from his/her year of admission to pass all the 4 semesters.

(b) A student has to secure at least 50% marks (i.e., Grade-D) in each course/paper in order to ***pass the paper.*** Otherwise, Grade-F will be allocated to him/her. A student remains absent in any examination, will get zero credit for that course/ paper but earmarked as absent in his/her mark sheet.

(c) To pass a course/ paper, a student will be given a maximum of three chances as given below:

i. regular examination,
ii. supplementary examination, and
iii. back-paper clearing examination along with a regular end-semester examination.

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

(d) 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.

(e) 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/she still fails to clear the paper(s) or remains absent in supplementary examination(s), he/she will have to clear those paper(s) in the following year along with the regular candidates.

(f) A student has to clear 50% of the allotted credits in 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 earn the required credits for those course(s)/paper(s), the student will have to be discontinued from the program as 'Disqualified' candidate.

(g) In particular, a student must have to earn the credits of the Dissertation Phase-I in the 3rd semester examination in order to be promoted to the 4th semester to continue the Dissertation Phase-II, even if he/she has earned more than 50% of the total credit. The candidate has to appear a supplementary examination to get it cleared otherwise he/she has to repeat the Dissertation-I in the next academic session as the last chance. If the candidate fails again to clear it, he/she has to leave the programas 'Disqualified' candidate.

(h) If a student fails to earn the credits of the Dissertation Phase-II or remain absent, he/she has to appear a supplementary examination to get it cleared otherwise he/she has to repeat the Dissertation-II in the next academic session as the last chance. If the candidate fails again to clear it, he/she has to leave the programas 'Disqualified' candidate.

(i) For appearing at any supplementary examination the unsuccessful candidate has 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.

(j) If a student fails to clear all the required credits for the successful completion of M.Tech degree within the stipulated time frame of 4 years, he/ she may apply for the readmission in same program / stream of the 1st semester of the next academic session along with fresh applicants by paying the requisite semester fees as applicable. This type of readmission shall be treated as supernumerary to the approved number of seats for that stream/ branch.

In brief: In order to obtain the M.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.

11. Absent criteria

Failure to fill up the examination form shall be considered as missing a chance and such candidate shall have to appear at the same semester examination.

12. 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 three (02) theoretical courses/papers in any semester examination may be re-examined on request by the examinee subject to the condition that she / he secures a minimum of 50% marks in the rest of theoretical courses/papers in that semester.

iv) In re-examination of course(s)/paper(s) for any semester of M.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 from that Department itself other than the original examiner(s) of that particular course/paper.

13. Mark/Grade-Sheet

(a) At the end of each End Semester Examination, a Mark/Grade-Sheet showing 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.

(b) A consolidated Mark/Grade-Sheet, showing the overall performance in the M.Tech. program indicated by **CGPA**, will be issued only to those successful students who have passed all the theoretical and practical papers of all of the 4 semesters.

The consolidated Mark/Grade-Sheet shall consist of two components. The first component will have the information for the entire End Semester Examinationresultsas mentioned in TABLE-6.

TABLE–6

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

The second component (to be included only for final End Semester Examination result) will have a summary of all the semesters having the basic information as mentioned in TABLE-7.

TABLE–7

Semester	Total credit	Credit obtained	SGPA	Full Marks	Marks obtained	Cumulative statement	
						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**as indicated in Table-8.

TABLE–8

CGPA obtained	**Result to be awarded**	**To be denoted by**
7.0 and above	First Class	I
6.0 and above, less than 7.0	Second Class	II
Less than 5.0	Fail	F

c) The Mark/Grade-Sheet for all semesters should highlight the following statements as applicable:
"M. Tech. in DDDD" with specialisation SSSS
DDDD and SSSS: Degree with specialization offered as in TABLE-1.

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

15. The Template of Certificate for the M.Tech. Degree will be as follows:

UNIVERSITY OF CALCUTTA

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

Vice Chancellor
Senate House

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

16. 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.

B. Detailed Syllabus of each M.Tech program
(Available with the respective department)