

## **Information, Rules and Regulations**

### **For Examination and Evaluation System**

University of Mumbai has implemented Credit Based Semester and Grading System from the academic year 2012-13 for Bachelor of Engineering under Faculty of Technology. As the requirements for a particular degree (undergraduate or postgraduate), a certain quantum of academic work measured in terms of credits is laid down in general. Learner earns credits every semester by satisfactorily clearing courses/other academic activities. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly the credit associated with any of the other activities is dependent upon the quantum of work expected to be put in for each of the other activity per week.

#### **Credit Assignment**

##### **Theory and Laboratory Courses:**

Courses are broadly classified as *Theory courses* and *Laboratory Courses*. Theory courses consist of lecture (**L**) and /or tutorial (**T**) hours, but may have attached practical (**P**) hours in special cases. Laboratory courses consist of practical hours, but may have attached tutorial hours in special cases. Credit (**C**) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (**1**) for lecture and tutorial hours, and a multiplier of half (**1/2**) for laboratory hours. The credit structure and its allocation is available in the syllabus scheme of each semester.

##### **Minimum Credit Requirements**

The minimum credit required for award of a B.E. degree is as per the credits mentioned in the respective course. This is normally divided into Theory courses, tutorials, laboratory courses, seminars and projects in duration of eight Semesters. The credits are distributed semester wise as shown in the structure and syllabus manual of each programme. Courses generally progress in sequences, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester wise schedule of courses given in the syllabus manual of respective programmes.

## Minimum credits required to avail Bachelor of Engineering degree

### CBGS PATTERN

	I	II	III	IV	V	VI	VII	VIII	Total Credits
CE	27	27	28	28	24	24	25	27	210
EXTC	27	27	26	28	27	28	27	26	216
IT	27	27	28	28	26	25	27	26	214
PPT	27	27	26	26	27	26	30	24	213
BT	27	27	28	29	25	26	25	25	212
ME	27	27	24	28	27	28	27	25	213

### CHOICE PATTERN

	I	II	III	IV	V	VI	VII	VIII	Total Credits
CE	27	27	26	27	27	26	26	26	212
EXTC	27	27	26	25	27	25	26	24	207
IT	27	27	26	26	26	26	26	27	211
PPT	27	27	25	25	25	26	27	20	202
ME	27	27	26	26	27	25	25	27	210

### CHOICE "C "PATTERN

	I	II	III	IV	V	VI	VII	VIII	Total Credits
CE	18	20	23	24	Will be updated after syllabus revision				85
EXTC	18	20	24	24					86
IT	18	20	23	23					84
PPT	18	20	23	24					85
ME	18	20	24	23					85

### Course/Subject codes

In the syllabus manual of each programme of a particular discipline, subject code is assigned for each course. The subject code consists of six to seven digits. First two digits (letters) indicate the program of a particular discipline, next digit (letter) indicates course is either core/compulsory or elective or laboratory or seminar or Dissertation/Project. A fourth digit (number) indicates semester of a program and fifth and sixth digit (number) indicates serial number of course. A seventh digit (number) is only applicable for elective course which indicates the serial number of elective course in that group.

For example -

Core/compulsory course	Elective course	Laboratory course
<b>**C101</b>	<b>**E1011</b>	<b>**L101 **</b>

Where,

First two digits (letters)	**	: indicates program name
Third digit (letter)	C	: indicates Core/Compulsory course;
	E	: indicates Elective course
	L	: indicates laboratory course;
	S	: indicates Seminar
	D	: indicates Dissertation
Fourth digit (number)	1/3/4	: indicates semester in which that course to be Studied
Fifth and sixth digit (numbers)	01	: indicates serial number of course
Seventh digit (number)	1/2/3/4	: indicates serial number of elective course in a Group

The first two letters used in coding of courses indicates respective programmes. Only exception to this is first year engineering; wherein first two digits indicates First Year Engineering (FE).

### EXAMINATION / ASSESSMENT AND GRADING

Semester wise performance assessment of every registered learner is to be carried out through various modes of examinations. These include Internal Assessment and End Semester Examination. Internal Assessment includes class tests, home assignments based on live

problems, course projects either in a group or individually. The modes of evaluation and distribution of weightage for each of the assessments is given in the syllabus manual of each programmes. Normally weightage of Internal Assessment and End Semester Examinations 20 and 80 percentage respectively in theory courses. In laboratory courses continuous assessment should be carried out and appropriate weightage should be given to each practical/assignment/course project and proper record of the same to be preserved by the concerned faculty for the purpose of inspection as and when required.

### **Attendance**

Attendance for all Theory, Tutorial, Practical, Seminar and Project is compulsory. As per the University Ordinance 119, 75 % attendance is compulsory for keeping the term.

## **Internal Assessment Examination**

### **Additional Internal Assessment Examination**

The current CBSGS system in Faculty of Technology has been implemented from the Academic Year 2012-13, wherein students have to appear for two Internal Assessment Tests (IAT) during the semester. The average marks of these two IAT are considered as one head of passing in the respective subjects. Presently, there is no provision for conducting additional IAT for students who remain absent.

### **Modes of Assessment/Evaluation**

#### **Modes of Evaluation for Theory Courses**

Various modes of assessment used for rating learners' performance in a theory course include Internal Assessment and End Semester Examination. Relative weightage for Internal Assessment is typically 20 per cent. This will consist of two test out of which one is compulsory class test and another is either a class test or assignment on live problems or course project in a group/individually.

The end semester examination will be held as per the university schedule and the relative weightage for this would be 80 per cent. It is normally of 3 hours duration and will cover the full syllabus of the course. **The end semester examination is mandatory.** The **grade** for **theory courses** can be **awarded** only after **successfully completion** of both **Internal Assessment** and **End Semester Examination** of the respective course as per the curriculum manual of the respective programme.

### **Modes of Evaluation for Laboratory Courses**

The assessment in a laboratory course will be based on regular supervision of the learner's work, her/his performance in viva-voce examinations, the quality of their work as prescribed through laboratory journals and an end semester test that contains performing an experiment if practical examination is mentioned. It is obligatory to maintain a laboratory journal as prescribed by the course instructor. Final submission/examination for laboratory courses will normally be held before the end semester examination (final theory examinations). The **grade for laboratory courses** can be awarded only after **successfully completion of Term Work, Practical and/or Oral** examination as per the curriculum manual of the respective programme.

### **Modes of Evaluation for Projects**

**B.E. Project:** Project is separately graded, at the end of the respective semesters. These projects are supervised or guided, and need regular interaction (at least once a week) with the supervisor/guide. Project group has to submit a project report and defend it in front of a panel of examiners. Panel of examiners for Project-I evaluation will be appointed by Head of Department/Institute, while as for Project-II evaluation will be conducted by pair of Internal and External examiners appointed by University. The dates for submission of reports, the dates for presentations are to be scheduled as per the guidelines of University and details of mode of assessment are given in the curriculum manual of respective programmes. Project is a part of term work; the project report will not be accepted if students fail to complete the project successfully. The **grade for Project** can be awarded only after **successfully completion of Term Work and Oral Presentation** as per the curriculum manual of the respective programme.

### **Grading of Performance**

#### **Letter Grade and Grade Point Allocation**

The Credit and Grading system will be effective from the academic year 2012-2013 for Faculty of Technology of University of Mumbai. In every course, based on the combined performance in all assessments in a particular semester as per the curriculum/syllabus, the student is awarded a letter grade. These letter grades not only indicate a qualitative assessment of the learner's performance but also carry a quantitative (numeric) equivalent called the Grade Point. The letter grades and their equivalent grade point applicable for **undergraduate** programme are given below:

Percentage of Marks Obtained	Letter Grade	Grade Points	Performance
80.00 and above	O	10	Outstanding
75.00 – 79.99	A	9	Excellent
70.00 – 74.99	B	8	Very Good
60.00 – 69.99	C	7	Good
50.00 – 59.99	D	6	Fair
45.00 – 49.99	E	5	Average
40.00 – 44.99	P	4	Pass
Less than 40.00	F	0	Fail

A learner who remains **absent** in any form of **evaluation/examination**, **letter grade** allocated to him/her should be **AB** and corresponding **grade point** is **zero**. S/he should reappear for the said evaluation/examination in due course.

### SGPI/ CGPI Calculation

#### Semester Grade Performance Index (SGPI)

The performance of a learner in a semester is indicated by a number called Semester Grade Performance Index (SGPI). The SGPI is the weighted average of the grade points obtained in all the courses by the learner during the semester. For example, if a learner passes five courses (Theory/labs./Projects/ Seminar etc.) in a semester with credits C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> and C<sub>5</sub> and learners grade points in these courses are G<sub>1</sub>, G<sub>2</sub>, G<sub>3</sub>, G<sub>4</sub> and G<sub>5</sub> respectively, then learners' SGPI is equal to:

$$SGPI = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4G_4 + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

The SGPI is calculated to two decimal places. The SGPI for any semester will take into consideration the “**F**or **AB**” grade awarded in that semester. For example if a learner has Failed in course 4, the SGPI will then be computed as:

$$SGPI = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4 * ZERO + C_5G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

## Cumulative Grade Performance Index (CGPI)

An up to date assessment of the overall performance of a learner from the time s/he enrolled the University of Mumbai is obtained by calculating a number called the Cumulative Grade Performance Index (CGPI), in a manner similar to the calculation of SGPI. The CGPI therefore considers all the courses mentioned in the curriculum/syllabus manual, towards the minimum requirement of the degree learner have enrolled for. The CGPI is calculated at the end of every semester to two decimal places and is indicated in semester grade report cards. The CGPI will reflect the **failed status** in case of **F grade(s)**, till the course(s) is/are **passed**. When the **course(s)** is/are **passed** by obtaining a **pass grade** on subsequent examination(s) the **CGPI** will only reflect the **new grade** and not the **fail grades** earned earlier.

Example: Up to semester  $r$  a learner has registered for  $n$  courses, among which s/he has “ $F$ ” grade in  $i^{th}$  course. The semester grade report at the end of semester  $r$  therefore will contain a CGPI calculated as:

$$CGPI = \frac{C_1G_1 + C_2G_2 + C_3G_3 + \dots + C_i * ZERO + \dots + C_nG_n}{C_1 + C_2 + C_3 + \dots + C_i + \dots + C_n}$$

Even if a learner has **failed** in a course **more than once**, the course will figure **only once** in the **numerator** as well as the **denominator**. At the end of semester  $r+1$  s/he has appeared for Examination for  $k$  number of courses including the  $i^{th}$  **backlog course** and has cleared all the courses including the **backlog course**, the CGPI at the end of this semester is calculated as,

$$CGPI = \frac{C_1G_1 + C_2G_2 + C_3G_3 + \dots + C_i * G_i + \dots + C_nG_n}{C_1 + C_2 + C_3 + \dots + C_i + \dots + C_n}$$

There will also be a **final CGPI** calculated which considers **all the credits earned** by the learner specified for a particular programme.

## Heads of Passing

Internal Assessment (IA) and End Semester Examination (ESE) should be two separate heads for passing. Apart from these, Practical and /or Oral examination also should be independent head/s of passing.

**Note:** Even though **Term Work** is not a **separate head** of **passing**, a learner should **satisfactorily complete Term Work** in **all courses** for a particular semester as per syllabus/curriculum manual to be **eligible** to **appear** for any form of **examination**.

## Promotion of Learner and Award of Grades

A learner will be declared **PASS** and eligible for **grade** in a particular course of **undergraduate** programme if,

- A learner secures **at least 40% marks in each head of passing** mentioned above.

OR

- If learner **fails** in **Internal Assessment** but secure **more than 50% in total (Internal Assessment + End Semester Examination)** in that course.

## Carry Forward of Marks

In case of a learner who does not fulfill criteria mentioned in above and fails in the **Internal Assessment** and/or **End Semester Examination** in one or more courses:

- A learner who **PASSES** in the **Internal Assessment** but **FAILS** in the **End Semester Examination** of the course shall reappear for the **End Semester Examination** of that course. However his/her marks of the **Internal Assessment** shall be **carried over** and he/she shall be entitled for grade obtained by him/her on passing.
- A learner who **PASSES** in the **End Semester Examination** but **FAILS** in the **Internal Assessment** of the course shall **reappear** for the **Internal Assessment** of that course. However his/her marks of the **End Semester Examination** shall be **carried over** and he/she shall be entitled for grade obtained by him/her on passing.

## Re-examination of Internal Assessment and End Semester Examination

**Re-examination** for **Internal Assessment** should be completed before the commencement of next semester theory examination.

**Example:** A learner who is supposed to reappear for Internal Assessment in semester-I course will appear for the re-examination before commencement of End Semester Examination of semester -II.

Re-examination of Internal Assessment will be based on single examination having same marks as of original assessment. A learner who supposed to reappear for Internal Assessment will be given some work by the concerned teacher. The work assigned can be of the form of a course project/ assignment problems/ test/ tutorials etc. A learner will do the submission of the assigned work in the predefined period. Records should be maintained properly for all the re-examinations as well as Internal Assessments.



**Re-examination of End Semester Examination** will be conducted as per the schedule planned by University of Mumbai

**Allowed to Keep Terms (ATKT):**

1. A learner shall be allowed to keep term for Semester II irrespective of grades obtained in each course of Semester I.
2. A learner shall be allowed to keep term for Semester III if s/he passes each of Semester I and Semester II

**OR**

S/he fails in not more than **eight heads** of passing of which not more than **five** shall be in End Semester Examinations of Semester I and Semester II taken together.

3. A learner shall be allowed to keep term for Semester IV irrespective of grades obtained in each course of Semester III.
4. A learner shall be allowed to keep term for Semester V if s/he passes in all heads of Semester I, Semester II, Semester III and Semester IV

**OR**

S/he has passed in all heads of Semester I and Semester II and fails in not more than **eight heads** of passing of which not more than **five** shall be in End Semester Examinations of Semester III and Semester IV taken together.

5. A learner shall be allowed to keep term for Semester VI irrespective of grades obtained in each course of Semester V.
6. A learner shall be allowed to keep term for Semester VII if s/he passes in all heads of Semester I, Semester II, Semester III, Semester IV, Semester V and Semester VI

**OR**

S/he has passed in all heads of Semester I, Semester II, Semester III and Semester IV and fails in not more than **eight heads** of passing of which not more than **five** shall be in End Semester Examinations of Semester V and Semester VI taken together.

7. A learner shall be allowed to keep term for Semester VIII irrespective of grades obtained in each course of Semester VII.

Note: **Grade AB** should be considered as **failed** and treated as one head for deciding **ATKT**

## **Ordinances related to admission**

**0.6242:-** A learner who has passed semester I and Semester II examinations of engineering will be permitted to enter upon the program for semester III of second year engineering. However, a learner who has failed in not more than eight heads of passing of which not more than five shall be in End Semester Examinations of Semester I and Semester II considered together will also be permitted to enter upon the program for Semester III of second year engineering.

**0.6243:-**A learner who has passed semester I to semester IV examinations will be permitted to enter upon the program for semester V of third year engineering. However, a learner who has failed in not more than eight heads of passing of which not more than five shall be in End Semester Examinations of Semester III and Semester IV considered together will also be permitted to enter upon the program for Semester V of third year engineering provided he / she has passed semester I and semester II examinations of first year engineering.

**0.6244:-** A learner who has passed semester I to Semester VI examinations will be permitted to enter upon the program for semester VII of final year engineering. However, a learner who has failed in not more than eight heads of passing of which not more than five shall be in End Semester Examinations of Semester V and Semester VI considered together will also be permitted to enter upon the program for semester VII of final year engineering provided s/he has passed all examinations up to and including semester IV.

**0.6245:-**Notwithstanding anything contained in 0.3711R and 0.3712R a learner who has satisfactorily kept term for semester VI of the Third Year production Engineering program shall be deemed eligible to undergo training in industry if arranged during semester VII of final year engineering . However, s/he will be eligible to join semester VIII of the program provided s/he has failed in not more than eight heads of passing of which not more than five shall be in End Semester Examinations of Semester V and Semester VI considered together and has passed all examinations up to and including semester IV previously. The word 'previously' refers to semester I, Semester II, Semester III and Semester IV examinations conducted no later than the first half of the year or training.

## **Semester Grade Report**

At the end of each semester the semester grade report, which reflects the performance of the Learner in that semester is prepared and issued to the learner. This report includes the fail grades as awarded. Even when a failed course is passed in a later semester, no new modified grade report for that semester in which the fail grade was awarded will be issued. In case of

backlog courses learner should be issued separate grade report card as and when s/he passes the course/s. The grade cards can be issued to the Learners on the basis of the calculations of SGPI/ CGPI given earlier in a uniform format given by the University. The format of the grade card for the examinations conducted by the colleges shall be the same as the format for all the concerned programmes. The grade card will reflect the letter grade obtained by the learner, credit points of the individual courses of a particular semester, calculation of SGPI for each semester and the CGPI for all the successfully completed courses of Programme till that semester examination.

## **Rules & Procedure for providing the Photocopies of assessed Answer-book(s) to the examinee & Process of Revaluation of the Answer-Book(s)**

### **General Rules**

1. Applying for Photocopy of answer book and applying for Revaluation will be two independent processes.
2. Applying for the Photocopy of the answer book or having Photocopy of the answer book shall not be a pre-requisite for applying for revaluation of the answer book in the said subject.
3. The Examinee can independently apply for Revaluation or photocopy or both simultaneously, if he desires so.
4. The Examinee who desires to apply for revaluation are requested to note that, his / her original marks will become null & void as soon as he submits his application for the revaluation.
5. The Examinee shall check the University website, time to time for the various details regarding his / her result status / information / list etc., as the entire process of photocopy of revaluation is carried out through online system. It is the responsibility of the Examinee to verify the online detail. No complaint will be entertained in this respect after due date is over.
6. However, The University may adopt any other procedure for acceptance of the application / fees, which will be circulated for the information of examinees.

### **Rules & Procedure for providing the Photocopy(ies) of assessed answer-book(s)**

1. The facility of obtaining Photocopy(ies) of assessed and / or moderated answer book(s) by the examinee is extended with a view to bring transparency in the examinations system and ensure its credibility.

2. Under these rules applying for the Photocopy(ies) of answer-books shall be permitted in respect of :

(i) For theory papers of all the examinations conducted by the University in the current session.

(ii) The Scripts of practical examination / session work / project work / dissertation / internal assessment / term work (including theory part) wherever the written scripts are available, in the current session.

3. The Examinee(s) shall apply for the photocopy to the Principal of the respective College / Institution to which the candidate has registered for the said course in the prescribed format along with the non-refundable fee prescribed for the purpose by Controller of Examinations, as per the procedure & the manner decided by the University, time-to-time. The examinee belonging to the reserved categories shall be granted 50% concession in the Fees.

4. Application form for obtaining Photocopy(ies) of answer book(s) of the examinations conducted by University are accepted within Ten (10) working days from the date of the declaration of result of the examination. No application after the due date will be entertained on any ground whatsoever.

5. Incomplete application forms, applications with false Information, unsigned applications shall be rejected without assigning any reason whatsoever and the fees paid along with the application form neither shall be refunded nor will any representation be entertained in such cases.

6. The University shall endeavor to supply Photocopy(ies) of answer books as far as possible within twenty five (25) working days from the date of receipt of application(s) to the University.

7. On receipt of Photocopy(ies) the applicant examinee shall be the sole custodian of it and under any circumstances the examinee shall not part with the custody / possession of the same and also shall not use the same for any other purpose(s).

8. The Photocopy(ies) so obtained by the examinee shall be for his / her exclusive and relevant use. Neither the said examinee nor any other person can use the said copy to dispute or challenge the quality of assessment or quantum of marks assigned to the answer there-in.

9. If the examinee is found guilty of indulging in any act / attempt he / she shall be liable to be tried before the Unfair Means Inquiry Committee of the University and the decision taken by the authorities based on the recommendation of the said committee shall be final.

10. If his / her indulgence / commission in unfair act / attempt are proved, the examinee shall be liable for the punishment ranging from:

- (i) Cancellation of his / her marks in the said subject either original or after revaluation,
- (ii) Cancellation of his / her result in full of the said examination,
- (iii) Annulment of examination(s) maximum up to 5 exams.

11. On receipt of the photocopy, if the discrepancy of following nature is noticed by the examinee, he should apply to the University within seven (07) working days to the Controller of Examinations along with the fees of Rs.100 as Grievance Redressal fee.

- i) Mistake in totalling
- ii) Non assessment of question / sub-question
- iii) Improper photocopy

### **Rules and Procedure for the Revaluation of the Answer- book(s)**

If the examinee is not satisfied with the marks awarded, he/she may apply for revaluation to the University/Institutions/College in the prescribed form within the prescribed period and in the manner prescribed here-in-after.

1. The revaluation facility shall be for theory papers of all the examinations conducted by the University for the respective current session and the applications received within prescribed time limit.
2. Under these rules the revaluation of answer books shall also be permitted in respect of;
  - ii) The examinations conducted by the director of the institute of Distance Education/ Principals of constituent / affiliated Colleges or Directors / Heads of University Departments / Recognized institutions, on behalf of the University,
  - iii) The marks awarded to the scripts of practical examination / session work / project Work / dissertation / internal assessment / term work ( including theory part ) wherever written scripts are available.
3. All Examinees can apply for the revaluation of the answer book(s) with whatever marks he / she secured and even the Zero Marks.
4. The Examinee can apply for the revaluation of the his / her answer book(s) of the as many subjects as he / she desires.
5. The Examinee shall apply for Revaluation in the prescribed form along-with prescribed fee and in the manner & procedure decided by the University.
6. The candidates belonging to the reserved categories shall be given 50 % concession in the fees, provided the Principal of the concern college certify the same.

7. For the examinations conducted by the University, the prescribed application from for revaluation of answer book should be submitted to the college, within Ten (10) working days from the date of the declaration of the result of the respective examination.
8. For the examinations conducted by the college/ Institutions, and also for practical examination / sessional work / project Work / dissertation / internal assessment / term work (including theory part) wherever written scripts are available, the prescribed application from for revaluation of answer book should be submitted to the respective college / Institutions, within Ten (10) working days from the date of the declaration of the result of the respective examination.
9. Examinee has to endorse all details / marks correctly in the application form. Any false information, if observed at any time, the application will be summarily rejected. No refund will be entertained in such cases.
10. The examinee shall submit the application and remit the prescribed fees in the manner & procedure decided by University.
11. The applications for revaluation received after the last date shall not be accepted by the University under any circumstances, whatsoever.
12. The revised marks obtained by a candidate after revaluation, as accepted by the University shall be taken into account for the purpose of amendment of his results only and the said result will be communicated to the student(s).
13. Pending the process of revaluation, and subject to the availability of the seats in the college, the student may be admitted to the next higher class to which he could have been admitted if, he / she had passed in the said examination or had been granted A.T.K.T. for admission to the next class in the original examination as per the rules applicable for the stream and faculty of his education, as per the following norms:-
  - (i) The student may be admitted to the next higher class to which he could have been admitted if, he / she had passed in the said examination or had been granted A.T.K.T. for admission to the next class in the original examination as per the rules applicable for the stream and faculty his / her education, if he / she had originally obtained required passing marks in the papers in which he / she had applied for revaluation,
  - (ii) The college shall be entitled to charge fees of Rs.500/- at the time of granting admission to such students to the next class before declaration of the result of the revaluation,
  - (iii) Such admission shall be provisional; and automatically stands cancelled on receipt of the result of revaluation process, if the student is not declared passed in the requisite number of the subjects on revaluation which would entitle him / her to take admission in the next higher

class, and in such case the fees originally collected by the college or any part of the same shall not be refunded.

14. In case if the student is declared pass in the requisite number of the subjects on revaluation which would entitle him / her to take admission in the next class as per the Ordinances / regulations, the provisional admission will be regularized in the college.

15. Pending the declaration of the result of the revaluation, the students who have taken admission to next higher class, as mentioned above, shall be allowed to appear at the examination of the next class however, their results of the next examinations shall not be declared if they could not pass the requisite number of the subjects on revaluation which would entitled them to take admission in the next class; and in case the students does not succeed in passing in such requisite number of subjects, their admission to the examinations of the next class, their performance and **the results of the same shall be treated as null and void.**