R.9 Credit System and Mode of evaluation
For ICT Mumbai Campus

1. Introduction

The Institute implemented the credit system along with continuous assessment since it became a Deemed University in 2009. Since then, several changes have been made in the curricula and evaluation system from time to time with the approval of statutory bodies. This is the revised document for the evaluation system.

2. Course Credits

In general a certain quantum of work measured in terms of **credits** is laid down as the requirement for a particular degree. The student acquires credits by passing courses every semester, the amount of credit associated with a course being dependent upon the number of hours of instruction per week in that course.

There are mainly two types of courses in the Institute - lecture courses and laboratory courses. Lecture courses consist of lecture (L) and tutorial (T) hours. Laboratory courses consist of practical (P) hours. The credit (C) for a course is dependent on the number of hours of instruction per week in that course, as given below:
  (1) 1h/week of lecture (L) or tutorial (T) = 1 credit
  (2) 2h/week of Practicals (P) = 1 credit
  (3) Credit (C) for a theory course = No. of hours of lectures per week +
                      No. of hours of tutorials per week = L + T
  (4) Credits (C) for a Laboratory course =
                      ½ x No. of hours of laboratory course per week

Credits will be assigned to In-plant, Seminar, Projects and other mandatory course requirements also and these will be mentioned in the respective syllabi. There may be some non-credit requirements. A student is required to earn credits as mentioned in the syllabus.

3. Evaluation
3.1 The marks allotted for evaluation to all subjects would be 100, irrespective of the Credits for a particular subject. The weightage to different modes of assessments shall be as under.

	In-Semester evaluation		End-Semester-Exam	Components of continuous mode
	Continuous mode	Mid Semester-Exam		
Theory	20%	30%	50%	Quizzes, class tests (open or closed book), home assignments, group assignments, *viva-voce* assignments, discussions
Practicals	50%	-	50%	Attendance, *viva -voce*, journal, assignments, project, experiments, tests

3.2. In-Semester Evaluation:
(a) It is expected that the teacher would conduct at least two assessments under the continuous mode in a Semester of which at least one should be before mid semester.
(b) The teacher will announce at the beginning of the respective course the method of conducting the tests under the continuous mode and the assignment of marks
(c) In-semester performance of all students should be displayed and sent to the academic office by the teacher at least 15 days before the end-semester examination.
(d) For the theory courses, there will be one mid-semester test for each course to be held as per the schedule fixed in the Academic Calendar.
(e) All mid semester examination will be for 30 marks and 2 h duration.
(f) The in semester, continuous assessment evaluation shall be shown to the student from time to time throughout the semester, as and when the evaluations are conducted by the subject teacher.
(g) The mid semester examination answerbooks shall be graded by the subject teacher and returned to the students within a period of 10 days from the date of examination.
(h) Candidate must secure at least 30% of the marks for In-Semester (continuous Assessment plus mid sem) evaluations for him/her to be eligible to appear for end term examination

3.3. End-Semester examination:
   a) The semester end examination will cover the full syllabus of the course and will be conducted as per the Institutional time table at the end of each semester.

   b) End semester examination will be for 50 marks and 3 h duration. The marks shall be scaled based on the number of credits given to particular subject.

   c) The end semester answerbooks shall be graded by the subject teacher within a period of 15 days from the date of examination. The subject teacher shall conduct an "open house session" with the candidates registered for the course, wherein, the registered candidates can see the assessment of their answerbooks by the subject teacher. After conducting such a session and making changes in the marks, if any, the subject teacher shall send the marks to the Academic Office. No revaluation of these examinations will be allowed.

3.4 Evaluation in Laboratory Courses
The evaluation of Laboratory courses would be done in the following manner.

Continuous Assessment		End Term Examination	
Parameter	Marks	Parameter	Marks
Completion of all experiments (based on grades in laboratory log book)	20	Satisfactory Performance of Experiment/computer/drawing (s)	30
Submission of fair Journal	10		
Quality of Flow Diagram Results, Graphs, Comments	10	Quality of Flow diagram Results, Graphs, Comments	10
Viva(s)	10	Viva	10

3.5 Evaluation in in-Plant Training

At the end of every in-plant training term, students will have to submit (i) a written report of the work carried out, and (ii) Evaluation of the student from the Industry Mentor. After coming back to the Institute, the student would have to present the work carried out to a committee of two faculty members of the Institute. The presentation would be evaluated by the committee and student will be given grade for the in-Plant training based on the following parameters

3.5.1 Format for Evaluation by Industry Mentor

Name of the Student: _____

Name and Designation of the Mentor: _____

Name and Address of Organization / Place of Internship: _____

_____

_____

Email: _____ Phone: _____

Internship Duration: Start Date: _____, End Date:_____

Instruction to Mentor: Please evaluate the student on following Parameters & tick appropriate column:

Excellent: > 80%, Good: 60 – 80%, Satisfactory: 40 – 60%, Needs Improvement: < 40%

	Needs Improvement	Satisfactory	Good	Excellent
General Behavior: Ethics and Attendance				
Oral and Written Communication Skills				
Interpersonal Skills				
Technical Knowledge				
Professional Skills: Initiative and Motivation				
Managerial Skills: Time and Resource				

Any Other Remarks: _____

Signature of the Mentor: _____

3.5.2 Format for Evaluation by Faculty Members of the Institute and assigning grade

Name of the student: _____

	Item	Marks	
		Masters course out of 450	**Bachelors course out of 100**
Report	Background of Project	/25	/05
	Technical work don i. Experiment performed ii. Mathematical modelling if any iii. Design	/125	/30

	iv. Techno-economic feasibility v. Analysis of data		
	Conclusions	/30	/10
	Writing skills including formatting as per given instructions	/30	/05
Presentation	i. Presentation based on the work performed and its analysis. ii. Presentation skill	/90	/20
Industry Mentor	Marks given by industry mentor	/150	/30
Total		/ 450	/100

3.6 Passes and Fail

(a) The candidates who obtain 40% and more marks of the total marks of a subject head shall be deemed to have **passed** the respective subject head.

(b) The candidates who obtain marks less than 40% of the total marks of a subject head shall be deemed to have **failed** in the respective subject head **(Grade FF).**

3.7 Grades:

(a) The performance of a student shall be documented by a **Letter grade.** Each letter grade has a **Grade point** associated with it. The Grades and Grade points shall be assigned to each head of passing and both will be indicated in the mark-list of the semester examination.

(b) The total marks (in-semester + end-semester) of a candidate in a subject head are converted into a letter grade, based on the relative (and some times the absolute) performance of the student.

Letter Grade	Grade Point
AA	10
AB	9
BB	8
BC	7
CC	6.5
CD	6
DD	5.5
EE	5

(c) For granting class and calculating percentage marks secured by the candidate, CGPA will be multiplied by 10.

If CGPA is greater than 7.0, candidate would be assigned First Class with Distinction.

If $6.0 \leq CGPA \leq 6.99$ candidate would be assigned First class.

If $5.0 \leq CGPA \leq 5.99$ candidate would be assigned Second class.

(d) The grades to be allotted in the case of students who fail or do not appear at the end-semester examination shall be as under.

Letter Grade	Grade Point	Explanation
FF	0	The candidate fails in subject head. The candidate will be allowed to take end-semester repeat or subsequent examinations as per rule.
XX		The candidate has not kept term for the subject head due to attendance less than requisite. Further see 3.5(g) below. In the above cases, the candidate has to repeat the respective course by paying the fees.
I	0	The candidate has kept term for the subject head, has taken all the internal examinations with satisfactory performance, but has failed to take the end-semester examination or repeat examination due to genuine reasons. The candidate will be allowed to take end-semester repeat or subsequent examinations as per rule.
FR	0	The candidate has exhausted all the permissible chances to clear the end-semester examinations. The candidate has to register for the respective semester again for all the subject heads or will be out of the respective degree course as per the rules.
DR	0	(i) The candidate hasn't participated in academic programme. (ii) The candidate has taken a drop for the subject head; - provided he/she intimates the same (i or ii) at least 7 days in advance of the commencement of the end-semester examination for the respective year.

(e) Grades **FF** and **I** are place-holders only and do not enter into CPI/SPI calculations directly. These grades get converted to one of the regular grades after the end-semester examination.

(f) A candidate with an **FR** grade is not eligible for any repeat examination in that course and has to re-register for that semester by paying the appropriate fees.

(g) **I** grade will not be continued beyond the permissible number of end-semester/repeat examinations [Refer to current Regulation R.9 (9) and R.9 (10)].In the six consecutive exams conducted by the institute, irrespective of whether the candidate fails to take any of these exams.

(h) **'XX' Grade:** The grade **XX** in a course is awarded if – (i) candidate does not maintain the minimum 75% attendance in the Lecture/Tutorial/Practical classes, (ii) candidate receives less than 30% of the combined marks assigned for continuous assessment and mid-semester examination, and (iii) candidate indulges in a misconduct/uses unfair means in the examination, assignments, etc., of a nature serious enough to invite disciplinary action in the opinion of the teacher.

(**Note:** Award of the **XX** grade in the case of h(iii) above shall be done by Disciplinary Action Committee (DAC)).

(i) The names/roll numbers of students to be awarded the **XX** grade should be communicated by the teacher to the Academic office as per academic calendar before the last date of submission of the application for end-semester examination.

3.8. Awarding the grades

The grading scale ranks the students on a statistical basis on the basis of the overall performance of the students of a given class in the given subject head. Therefore, statistical data on students' performance is a prerequisite for applying the grading system. While assigning grades in a given subject head, it is essential to know the **average marks (AM)** obtained by the students *who have passed the subject head* and the **highest marks (HM)** obtained in the *same subject head*.

3.8.1. If the **average marks (AM)** obtained by the students *who have passed the subject head* is <60%, the interval AM shall be awarded grade CC and the other grades shall be decided as follows:
   (i) AA, AB, BB, and BC grades shall be decided between the AM and HM by dividing the range in equal intervals.
   (ii) CD, DD and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.

3.8.2. If the **average marks (AM)** obtained by the students *who have passed the subject head* is such that **60% ≤ AM < 70%,** the interval AM shall be awarded grade BC and the other grades shall be decided as follows:
   (i) AA, AB, BB grades shall be decided between the AM and HM by dividing the range in equal intervals.
   (ii) CC, CD, DD and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.

3.8.3. If the **average marks (AM)** obtained by the students *who have passed the subject head* is such that **70% ≤ AM < 80%,** the interval AM shall be awarded grade BB and the other grades shall be decided as follows:
   (i) AA and AB grades shall be decided between the AM and HM by dividing the range in equal intervals.
   (ii) BC CC, CD, DD and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.

3.8.4. If the **average marks (AM)** obtained by the students *who have passed the subject head* is such that **80% ≤ AM < 90%,** the interval AM shall be awarded grade AB and the other grades shall be decided as follows:
   (i) AA grades shall be decided between the AM and HM by dividing the range in equal intervals.
   (ii) BB, BC CC, CD, DD and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.

3.8.5. If the **average marks (AM)** obtained by the students *who have passed the subject head* is such that **AM ≥ 90%,** the interval AM shall be awarded grade AA and the other grades shall be decided as follows:

(i) AB, BB, BC CC, CD, DD and EE grades shall be decided between the AM and minimum marks required for passing the head (i.e. 40%) by dividing the range in equal intervals.

Absolute Grading

Absolute grading is to be awarded for subjects under the following cases:

(i) Subject in which candidate works under the supervision of a guide on a project involving work in individual capacity or working in a small group. The subjects where such work is involved are, for example, Seminar, Home Paper, Literature Review, Critical Review, Research Project, In-Plant Training, Summer Project, etc. Grades are awarded directly on the basis of marks secured by the student in such a subject head, as per the following table.

(ii) Subject in which the registered candidates are less than 8 in number. In such cases, calculation of Average Marks (AM) intervals and intervals for awarding grades higher than AM and lower than AM becomes statistically inaccurate. In such cases, grades are awarded directly on the basis of marks secured by the student in such a subject head, as per the following table.

	Letter Grade	Grade Points
Marks secured ≥ 80%	AA	10
75% ≤ Marks secured < 80%	AB	9
70% ≤ Marks secured < 75%	BB	8
65% ≤ Marks secured < 70%	BC	7
60% ≤ Marks secured < 65%	CC	6.5
55% ≤ Marks secured < 60%	CD	6
50% ≤ Marks secured < 55%	DD	5.5
40% ≤ Marks secured < 50%	EE	5
Marks secured < 40%	FF	0

4. SPI and CPI

(a) **Semester Performance Index (SPI):** The performance of a student in a semester is indicated by **Semester Performance Index (SPI),** which is a weighted average of the grade points obtained in all the courses taken by the student in the semester and scaled to a maximum of 10. (SPI is to be calculated upto two decimal places.)

A Semester Grade Point Average (SGPA) will be computed for each semester as follows:

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

Where
'n' is the number of subjects for the semester,

'c_i' is the number of credits allotted to a particular subject, and

'g_i' is the grade-points awarded to the student for the subject based on his performance as per the above table.

SGPA will be rounded off to the second place of decimal and recorded as such.

(b) **Cumulative Performance Index (CPI):** An up to date assessment of the overall performance of a student from the time he entered the Institute is obtained by calculating **Cumulative Performance Index (CPI)** of a student. The CPI is weighted average of the grade points obtained in all the courses registered by the student since he entered the Institute. CPI is also calculated at the end of every semester (upto two decimal places). .

Starting from the first semester at the end of each semester (S), a Cumulative Grade Point Average (CGPA) will be computed as follows:

$$CGPA = \frac{\sum_{i=1}^{m} c_i g_i}{\sum_{i=1}^{m} c_i}$$

Where

'm' is the total number of subjects from the first semester onwards up to and including the semester S,

'c_i' is the number of credits allotted to a particular subject, and

'g_i' is the grade-points awarded to the student for the subject based on his performance as per the above table.

CGPA will be rounded off to the second place of decimal and recorded as such.

(c) The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester / beginning of the next semester.

(d) **When** a student gets the grade 'FF', or I' in any subject head during a semester, the SGPA and CGPA from that semester onwards will be tentatively calculated, taking only 'zero' grade point for each such 'FF' or 'I' grade. When the 'FF' grade(s) has / have been substituted by better grades after the repeat examination or subsequent semester examination, the SGPA and CGPA will be recomputed and recorded.

5. Repeat Examinations

5.1. For those candidates who fail in a subject head or are eligible for appearing at the repeat examination, **Repeat End-Semester Examination** will be conducted within one month from the declaration of the results of regular end-semester examination, as per **Regulation R.14**.

5.2. The marks obtained by candidates in the in-semester examinations (continuous assessment and periodic test) will be carried forward in such cases.

5.3. Grading the performance in the Repeat Examination: The grades will be assigned as per 3.5 and 3.6 above. However, for a candidate taking any repeat examination or subsequent regular semester examination shall be awarded **one grade lower** than that decided on the basis of the actual marks obtained; provided 'EE' grade obtained in such an examination shall remain 'EE'. For reference see the table below.

Grade obtained in repeat or subsequent end-semester examination	Grade to be assigned	Grade point
AA	AB	9.0
AB	BB	8.0
BB	BC	7.0
BC	CC	6.5
CC	CD	6.0
CD	DD	5.5
DD	EE	5.0
EE	EE	5.0

5.4 Repeat Mid Sem Examination

Repeat Mid-semester examination is permitted only in case of unforeseen absenteeism of a candidate in the Regular Mid-sem examination. No candidate can claim to remain absent from the Regular Mid-Sem examination and ask for a Repeat Mid-sem examination for the purpose of not losing the allotted reason. The cases which merit consideration for Repeat Mid Semester examination can include only the following cases:

(i)   Hospitalization – Sufficient evidence of grave nature of illness should be provided in terms of:

   a. Medical Certificate on Official letter head stating the cause for being bed-ridden and/or hospitalization and signed by the Chief Medical Officer or equivalent authority of the hospital or Registered Medical Practitioner who treated the illness, as the case may be
   and

   b. Affidavit on Rs 20 stamp paper stating the precise reason for inability to attend the regular mid-semester examination. The affidavit must be signed by the student and witness-signed by Parents / local Guardian and also signed by the Chief Medical Officer or equivalent authority of the hospital or Registered Medical Practitioner who treated the illness, as the case may be;

   OR

(ii)   Immediate Family Bereavement (Parent / sibling / spouse) – candidate must submit relevant death certificate.

The candidate should inform the Head of the Department or Dean (A.P.) as soon as possible by telephone / fax / email immediately and the necessary hard copies of the documents should be submitted by the candidate to Dean (A.P.) forwarded through Head of the Department within one week of joining the Institute.

5.5 Repeat Practical Examination

Repeat examination in practical subject is permitted only under following cases: (i) Candidate has obtained 50% marks in Continuous assessment and appeared for the regular end semester practical examination and failed, (ii) Candidate has obtained 50% marks in Continuous assessment and could not appear for the regular end semester practical examination due to valid medical reason or family bereavement.

6. Passing of a Semester examination

A candidate shall be declared as **'PASSED'** any semester examination if he/she has
   (a) Cleared all heads of passing by securing grades EE or higher in all the heads;
   (b) Passed all the heads of passing such as project, seminar, training, etc. as per the rules;
   (c) Satisfactorily completed all the mandatory requirements of the course;
   (d) paid all the Institute dues;
   (e) No case of indiscipline pending against him/her.

7. Eligibility for the Award of a Degree

A candidate shall be declared eligible for the award of a degree, if he/she has cleared all the semester examinations as given in (6) above.

8. Allowed to keep terms (ATKT)

8.1 A candidate who has I grade in one or more heads of passing of an odd semester of an academic year shall be allowed to keep terms for the respective even semester.

8.2. A candidate shall be allowed to keep terms for the subsequent academic year if he/she has FF or I grades in not more than two heads of passing from all the heads of passing of the two terms of the previous academic year taken together. Such a candidate shall be declared as **FAILED, ATKT**.

8.3. A candidate who has not cleared Semester-I and II as per clause 6 above shall not be eligible to register for semester-V and VI.

8.4. A candidate who has not cleared Semester-III and IV as per clause 6 above shall not eligible to register for semester-VII and VIII

9. Repeating a course

9.1 A student is required to repeat the course of a subject head under the following situations:
   (a) A student who gets an **XX, FR, or DR** grade in a course; or
   (b) A student has exhausted all permissible chances to clear the subject head.

9.2 A candidate who remains absent for the in semester and end-semester examination of a semester and the corresponding repeat examination for **ALL SUBJECTS** shall have to take fresh admission for the corresponding semester; unless the candidate has dropped out / terminated from the course.

9.3 If a candidate at any semester fails to pass any the examination in consecutive examinations, including the repeat examinations, the candidate shall have to take readmission for the corresponding semester again in which the failure has occurred, provided the course has not changed. In case, the course has changed, the candidate will be asked to appear for an equivalent subject(s).

10. Improvement of performance

A candidate will be allowed to appear at the **entire end semester examination** after the regular end-semester examination as per the respective rules to improve the performance. In such a case if the result of the examination repeated –
1. Is better than the previous one, the previous result shall be declared null and void; and
2. Is worse that the previous one, the result of the subsequent examination shall not be declared.

11. Exit rules for poorly performing students

A candidate shall be excluded from a course under the following conditions:

(a) If he/she fails to pass any semester examination of the any year of the course in not more than four consecutive attempts (Examination conducted by Institute) from the date of joining the course.

(b) If he/she does not keep two consecutive semesters/terms without giving any reasonable justification (as prescribed by the institute) for doing so.

(c) If a candidate fails to fulfill all the requirements of his/her respective degree within the prescribed period from the date of taking admission to the course, the candidate shall be excluded from the course.