Procedure for "Choice Based Credit System (CBCS)"

2015-16

1. The course structure of each programme consists of 5 Professional Electives and 3 open electives.

2. Each professional elective gives a choice of three to four courses out of which the student has to select one course.

3. Each open elective also is given a choice of three to four courses, which does not necessarily have any perquisites and offered to a student of any programme.

4. A student is introduced to "Choice Based Credit System (CBCS)" for which he/she has to register for the courses as per the following rules:

   i. There is no choice for I and II year courses.

   ii. Courses once registered are final and CANNOT be changed / Interchanged or alternate choices will not be considered. However, if the subject/course that has already been listed for registration (by the HOD) in a semester could not be offered due to any unforeseen or unexpected reasons, then the student shall be allowed to have an alternate choice – either for a new subject (subject to offering of such a subject), or for another existing subject (subject to availability of seats), which may be considered. Such alternate arrangements will be made by the Head of Department, with due notification and time-framed schedule, within the FIRST WEEK from the commencement of classwork for that semester.

   iii. A student has a choice of dropping a course or registering an additional course (from the list of open electives) with a minimum of 21 and a maximum of 29 credits in each semester, but the credits allotted for each semester is considered for promotion. However, dropping a course may be permitted only after prior approval from the faculty advisor and HOD and also within 15 days from the beginning of the current semester.

   iv. A student should register himself/herself during the preparation and practical sessions for the upcoming semester.

   Grade points, based on percentage of marks awarded for each course will form the basis for calculation of SGPA (Semester Grade Point Average) and CGPA (Cumulative Grade Point Average).

5. A student has a choice of registering for credits from the courses offered in the programme.

6. All the registered credits will be considered for the calculation of final CGPA.

7. A student has to acquire a minimum of 5.00 SGPA in each semester for the award of B. Tech degree.

8. **Improvement Examinations:** A student who failed to secure SGPA of at least 5.00 in a semester can reappear for the external examination of the required courses of the semester for an improvement in SGPA, with the approval from HOD and faculty advisor.

9. **Promotion Rules:** A student shall be promoted to the next year according to the following rules:

   a) A student shall be promoted from I year to II year if and only if he/she secures 25 credits

from all the I year regular and supplementary examinations.

b) A student shall be promoted from II year to III year if and only if he/she secures 45 credits up to and including II year I Semester or 60 credits up to and including II year II Semester from all regular and supplementary examinations, whether or not the candidate takes the examinations.

c) A student shall be promoted from III year to IV year if and only if he/she secures 75 credits up to and including III year I Semester or 90 credits up to and including III year II Semester from all regular and supplementary examinations, whether or not the candidate takes the examinations.

10. **Grade Points:** A 10- point grading system with corresponding letter grades and percentage of marks, as given below, is followed

Letter Grade	Grade Point	Percentage of marks
O (Outstanding)	10	Marks >= 80 and Marks <= 100
A+ (Excellent)	9	Marks >= 70 and Marks < 80
A (Very Good)	8	Marks >= 60 and Marks < 70
B+ (Good)	7	Marks >= 55 and Marks < 60
B (Above Average)	6	Marks >= 50 and Marks < 55
C (Average)	5	Marks >= 45 and Marks < 50
P (Pass)	4	Marks >= 40 and Marks < 45
F (Fail)	0	Marks < 40
Ab (Absent)	0	

Earning of Credit:

A student shall be considered to have completed a course successfully and earned the credits if he/she secures an acceptable letter grade in the range O-P. Letter grade 'F' in any Course implies failure of the student in that course and no credits earned.

Computation of SGPA and CGPA:

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i) S_k **the SGPA of kth semester(1 to 8) is the ratio of sum of the product of the number of credits and grade points to the total credits of all courses registered by a student, i.e.,**

$$\text{SGPA } (S_k) = \sum_{i=1}^{n} (C_i * G_i) / \sum_{i=1}^{n} C_i$$

Where C_i is the number of credits of the ith course and G_i is the grade point scored by the student in the ith course and n is the number of courses registered in that semester.

ii) The CGPA is calculated in the same manner taking into account all the courses m, registered by a student over all the semesters of a programme, i.e., upto and inclusive of S_k, where $k \geq 2$.

$$\text{CGPA} = \sum_{i=1}^{m} (C_i * G_i) / \sum_{i=1}^{m} C_i$$

iii) The SGPA and CGPA shall be rounded off to 2 decimal points.

11. **Illustrative Example:**

The above equations are used for calculating the SGPA and CGPA, both of which facilitate the declaration of Academic Performance of a student at the end of successive semesters respectively. Both of them shall be calculated up to second decimal position, so that it can aid in rank ordering of students' performance. If two students get the same CGPA, the tie should be resolved by

considering the number of times a student has obtained higher SGPA; but if the tie has still not resolved, the number of times the student has obtained higher grades like O, A+, A shall be taken into consideration.

Semester	Course	Credits	Grade	Grade Point	Credits	SGPA/CGPA
I	T1	4	A	8	32	
I	T2	4	A+	9	36	
I	T3	3	C	5	15	
I	T4	4	B	6	24	
I	T5	4	B+	7	28	
I	L1	2	O	10	20	
I	L2	2	A	8	16	
I	L3	2	A+	9	18	
	Total	25			189	SGPA=189/25 =7.56
II	T1	4	A	8	32	
II	T2	4	A+	9	36	
II	T3	4	B	6	24	
II	T4	3	C	5	15	
II	T5	4	B	6	24	
II	L1	2	B	6	12	
II	L2	2	A+	9	18	
II	L3	2	B	6	12	
	Total	25			173	SGPA=173/25 =6.92 CGPA=362/50 =7.24

12. Passing Standards :
   A student shall be declared successful or 'passed' in a Semester, only when he gets a SGPA $\geq$ 5.00 (at the end of that particular Semester); and a student shall be declared successful or 'passed' in the entire Under Graduate Programme (UGP), only when gets a CGPA $\geq$ 5.00; subject to the condition that he secures a Grade Point (GP) $\geq$ 4 (P Grade or above) in every registered Subject/ Course in each Semester (during the entire UGP) for the Degree Award, as required.
13. In spite of securing P Grade or above in some (or all) Subjects/ Courses in any Semester, if a Student receives a SGPA < 5.00 at the end of such a Semester, then he 'may be allowed' (on the 'specific recommendations' of the Head of the Department and subsequent approval from the Principal) -
   (i) to go into the next subsequent Semester (subject to fulfilling all other attendance and academic requirements);
   (ii) to 'improve his SGPA of such a Semester (and hence CGPA) to 5.00 or above', by reappearing for ONE or MORE (as per Student's choice) of the same Subject(s) /

Course(s) in which he has secured P Grade(s) in that Semester, at the Supplementary Examinations to be held in the next subsequent Semester(s). In such cases, his Internal Marks (CIE Marks) in those Subject(s) will remain same as those he obtained earlier.
In these considerations, the newly secured Letter Grades will be recorded and taken into account for calculation of SGPA and CGPA, only if there is an improvement.

14. A Student shall be declared successful or 'passed' in any Non-Credit Subject/ Course, if he secures a 'Satisfactory Grade' for that Mandatory Course.

15. After the completion of each Semester, a Grade Card or Grade Sheet (or Transcript) shall be issued to all the Registered Students of that Semester, indicating the Letter Grades and Credits earned. It will show the details of the Courses Registered (Course Code, Title, No. of Credits, Grade Earned etc.), Credits earned, SGPA, and CGPA.

16. Final Percentage of marks:

For Final % of Marks equivalent to the computed final CGPA, the following formula may be used …

$$\% \text{ of Marks} = (\text{final CGPA} - 0.5) \times 10$$