ANKUSH SHIKSHAN SANSTHA'S

G H Raisoni College of Engineering, Nagpur

(AN AUTONOMOUS INSTITUTE AFFILIATED TO R.T.M. NAGPUR University)



Rules and Regulations

2016-17

CHOICE BASED CREDIT SYSTEM (CBCS)

(for undergraduate programs degree of Bachelor of Engineering)

Ver 1.0

G H RAISONI COLLEGE OF ENGINEERING, NAGPUR CHOICE BASED CREDIT SYSTEM (CBCS) REGULATIONS GOVERNING THE DEGREE OF BACHELOR OF ENGINEERING

All the academic UG programs of the institute are governed by the rules and regulation of G.H. Raisoni College of Engineering, Nagpur. These rules and regulations are applicable to all the students to this institute from academic session 2015-2016 onwards.

Rationale for Introduction of CBCS

- The University Grants Commission, New Delhi in its 12th plan guidelines directed the Universities in the country to implement the Choice Based Credit System (CBCS Scheme) in both the under-graduate and post-graduate programs.
- As per decision in the meeting of Government of Maharashtra, it was decided to start the scheme in the state from next session.
- To set Benchmark in the university and fulfill expectations of stakeholders

Advantages of the CBCS

- 1. Shift in focus from teacher-centric to learner-centric education
- 2. Respects 'Learner Autonomy'. Allows learners to choose according to their own learning needs, interests and aptitudes.
- 3. Affords more flexibility to the learners allowing them to choose inter-disciplinary courses, change majors, programs, etc.
- 4. Makes education more broad-based. One can take credits by combining unique combinations.
- 5. Facilitates Learner Mobility. Offers the opportunity to study at different times and in different places. Credits earned at one institution can be transferred to another.
- 6. Helps self-paced learning with more flexibility. Learners may undertake as many as max 30 credits per term including backlog if any which must be considered in top priority while counting credits
- 7. Moving from a fixed time table to a slot based timetable. Under this, a student will be able to choose the time he/she wants to attend a theory class/ lab.
- 8. A student can exercise the option to decide his/her own pace of learning- slow, normal or accelerated plan and sequence his/her choice of paper, learn to face challenges through term work/project work/ and may venture out to acquire extra knowledge/proficiency through add- on facilities.

Features of CBCS

- 1. Choice in the course registration per term maximum up to 30 credits & minimum 15 credits.
- 2. Choice in Option of selecting courses from all offered courses list.
- 3. Option of choosing interdisciplinary courses in the form of electives.
- 4. Choice of courses for additional learning as per usefulness of their professional career.
- 5. Choice for change of a course after 4 attempts (2 exams) only for Electives.
- 6. Choice for dropping a Course once in a term within ten instructional days/two weeks.
- 7. Choice for dropping complete term for training/project work / internship.
- 8. Additional Learning: Certification / Diploma / Post-Diploma from other disciplines.
- 9. UG students having a higher CGPA (8.75 or more) are permitted to credit a PG level course, in his/her major area of specialization to earn more credits for additional learning (Credits >180)
- 10. Facility of grade improvement for CGPA less than 6.75
- 11. Keeping checks for entry level of every term.
- 12. Fast learner may complete term work in minimum 3.5 yrs. However the degree awarding will be at the end of 4 yrs.
- 13. CBCS will be applicable to students to wish to opt for Credit Transfer Scheme with reputed academic institutes (COEP, VJTI, IITGN etc) and industries/organizations (BSNL-RTTC)

Key Terms

- 1. Term
- 2. Program
- 3. Parent Department
- 4. Teaching Scheme
- 5. Program Scheme
- 6. Course
- 7. Credit
- 8. Credit Transfer
- 9. Course Exemption
- 10. Institute Core
- 11. Institute Elective
- 12. Program Core
- 13. Program Elective
- 14. Course Registration
- 15. Pre Requisite for a Course
- 16. Anti-Requisite Course
- 17. Dropped Course
- 18. Dropping Term
- 19. Detained Course
- 20. Sample Path
- 21. Offered Courses
- 22. Exam Registration
- 23. Withdrawal Course
- 24. Backlog Course
- 25. Fast Learner/Achiever
- 26. Faculty Advisor

1 Abbreviations

- 1.1 "AICTE" means All India Council for Technical Education.
- 1.2 "AC" means Academic Council
- 1.3 "BE" means Bachelor of Engineering as undergraduate degree awarded from university
- 1.4 "BoG" means Board of Governance of the Institute.
- 1.5 "BoS" means Board of Studies
- 1.6 "CGPA" means Cumulative Grade Point Average
- 1.7 "CoE" means Controller of Examinations
- 1.8 "CAE" means Class Assessment Examination
- 1.9 "CBCS" Choice Based Credit System
- 1.10 "CTS" means Credit Transfer Scheme
- 1.11 "DSY" Direct Second Year
- 1.12 "DTE" means Directorate of Technical Education, Government of Maharashtra
- 1.13 "ETE" means End Term Examination
- 1.14 "ES" means Examination Scheme
- 1.15 "Institution" or "College" or "GHRCE" means G.H. Raisoni College of Engineering, Nagpur unless indicated otherwise
- 1.16 "PG" Program means Post Graduate Program
- 1.17 "RTMNU" or "University" means Rashtrasant Tukadoji Maharaj Nagpur University
- 1.18 "SGPA" means Semester Grade Point Average
- 1.19 "State Government" means Government of Maharashtra
- 1.20 "TAE" means Teachers Assessment Evaluation
- 1.21 "TS" Teaching Scheme

2 DEFINITIONS:

- **2.1Autonomous Institution/College:** means an institution/college designated as autonomous by UGC under UGC Act 1956 & affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
- **2.2Academic Autonomy:** means freedom in all aspects of conducting academic programs, granted by University for academic excellence.
- **2.3Academic Year:** Two consecutive (one odd + one even) Terms constitute one academic year.
- **2.4 Term:** It means duration **c**onsist of 15 weeks of academic work equivalent to 90 actual teaching days. The odd Term may be scheduled from June to November and even Term from December to May.
- **2.5 Programme:** An educational programme leading to award of a Degree for UG courses.
- **2.6 Course:** Usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weightage. The courses should define learning objectives and learning outcomes. A course may be designed to comprise lectures/tutorials/laboratory work/ field work/ outreach activities/project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these.
- **2.7 Branch:** Specialization or discipline of B.E. Degree Programme, like Civil Engineering, Mechanical Engineering, etc.
- **2.8 Grade:** It is an index of the performance of students in a credit course. Grades are denoted by AA, AB, BB, BC, CC, CD, DD and FF and for audit course grades are denoted by A, B, C and D.
- **2.9 Grade Point:** It is a numerical weightage allotted to each grade on a 10-point scale for credit course.
- **2.10 Credit:** A unit by which the course work is measured. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week per term.
- **2.11 SGPA (Semester Grade Point Average) :** It is a measure of academic performance of student/s in a Term.
- **2.12 CGPA (Cumulative Grade Point Average) :** It is a measure of overall cumulative performance of a student till that Terms.
- **2.13 Transcript:** After successful completion and award of degree(number of courses and credits) Transcript certificate issued to the student as per scheme of a program.
- **2.14 Dropped course:** The student registers for the course in a Term & he/she will drop a course from a specific term within 2 week of start of the term, if a student fills that the registered course is difficult
- **2.15 Detained course:** The student registers for the course in a Term but does not completed 100 % term work or having poor attendance in register course.
- **2.16 CTS (Credit Transfer Scheme):** Students of the institute can go at CoEP Pune / VJTI Mumbai / IIT Gandhinagar / Industry for a term to acquire certain credit which can be transferred to this Institute.
- **2.17 Faculty Advisor :** Faculty advisor shall advice and counsel the student about the details of the academic programme and the choice of courses considering the student's academic background and career objectives. Faculty Advisor will be allotted a batch of 15 to 20 students and will carry this batch of students till the completion of the degree of the students & whose signature should be required for every document of the student for exam and course registration.

3 Promotion Rules for the UG Programs:

The students admitted to the UG course will have to register for the courses as per the admission rules of Choice Based Credit System (CBCS Scheme) implemented from 2015-16 onwards. The student will be eligible to move to next level only if he/she secures minimum credit threshold as given below-

| Admission to Term | Candidates should have earned PASS grade |
|-------------------|---|
| | OR |
| | earned CREDITS in the following examination |
| TERM – I | XII Std OR equivalent |
| TERM – II | |
| TERM – III | CREDITS 30 OR Diploma (DSY)+ lateral |
| TERM – IV | |
| TERM – V | CREDITS 75 |
| TERM – VI | |
| TERM - VII | CREDITS 120 |
| TERM - VIII | |

4 Course Registration

- 4.1 It is mandatory for all students to register every term till the end of his/her study, for courses that he/she is going to study in the term through a Course Registration process
- 4.2 The list of courses offered by each program will be announced immediately after exams are over. Within 8 days of result declaration, students need to register.
- 4.3 Student can register course from multiple terms from a list of all offered courses given by the program in that term, provided term is grant for the pre-requisite course.
- 4.4 Selection of interdisciplinary courses from offered elective courses list.

4.5 Adding/Dropping of Courses

- 4.5.1 The student also will have option to drop a course within 10 instructional days /2 week of start of the term, if he feels that the course is difficult and he wishes to register the same in next term
- 4.5.2 Choice for dropping a Registered Course (max 2) once in a term within ten instructional days/two weeks.
- 4.5.3 Registering another course (ADD course) after dropping a Registered Course within two instructional days from the offered list and as per the availability of course.
- 4.5.4 A student has to re-register for the DROPPED course when the course is offered again by the program. The candidate may choose the same or an alternate course as per program scheme.

4.6 Dropping of Term

- 4.6.1 Choice for dropping complete term within norms (maximum duration of degree will not change).
- 4.6.2 Choice for dropping complete term for training/project work /Internship/CTS.
- **4.7** Multiple course registration after term grant (no detain) for the same course is not permitted except summer term and improvement exam.
- **4.8** If the student fails to clear the course during specified duration (2 exams) and wish to change a course then he/she has to register another course as per program scheme from the offered course list given by the program (Only for Elective courses).

4.9 Min & Max Credit Limit:

- 4.9.1 It is compulsory to Re-register the Dropped/ Detained courses first, before registering new courses, during subsequent course registration(s). Hence, the total credits available for registering the courses will be 30 (including Dropped/ Detained courses if any)
- 4.9.2 Maximum 30 and minimum 15 will be Credits Limit for New Course Registration
- 4.9.3 Minimum credit limit for the course registration will not be applicable, who wish to drop a complete term OR last term course registration/Industry Internship.
- 4.9.4 Minimum credit limit for the course registration will also not be applicable for the fast learner.
- 4.9.5 30 credits can be registered by students having CGPA > 9.25 and minimum 15 credit for new registration can be done by only those students who are having CGPA < 6.25. The remaining students should register minimum for full scheme; however they can enroll extra credits up to 30.

4.10 Additional Learning

Certification / Diploma / Post-Diploma

- 4.10. 1 Additional courses may be in the form of audit or credit. For audit courses only certificate will be issued and will not be mentioned on Grade card, however, credit courses shall be mentioned on the Grade Card in addition to the certificate.
- 4.10.2 Additional courses will not be considered for calculation of SGPA or CGPA/degree completion.
- 4.10.3 Additional courses may be from UG or PG of other department.
- 4.10.4 In case student opt for three or more courses of the single / multiple discipline may be awarded certificate or post diploma.
- 4.10.5 Undergraduate students having a CGPA of 8.75 or more are permitted to credit a Post Graduate level course (from the courses offered list decided by the program), in his/her major area of specialization (or related discipline) based on term credits. Students will get certification and credits for additional Post Graduate level courses.
- 4.10.6 Earned credit of Additional Post Graduate level courses will not be considered for calculation of SGPA or CGPA.

4.11 Elective Course

- 4.11.1 Students, who wish to take addition courses from other discipline, will have option to opt elective courses of the other discipline.
- 4.11.2 Student may opt for additional course from other discipline.
- 4.11.3 Student may opt Post Graduate course from other discipline.

4.12 Second year Diploma students teaching scheme

Diploma students admitted in Third Term must follow teaching scheme as it is offered for existing third semester scheme.

5 Exam Registration

- 5.1 A student should necessarily register separately for the end Term examinations in all the registered courses one month before the End Term Examination (except those who are detained).
- 5.2 A student detains in a course after exam registration then his/her exam registration for that course will be treated as cancelled and will have to appear for the exam whenever the said course is offered.
- 5.3 Students under CBCS shall be permitted to write a backlog exam of a course within two exams. If the student fails to clear the course during that exams, then, he/she has to re-register the course again whenever offered.
- 5.4 'FF'-grade is a fail grade. The course(s) in which a student has earned 'FF' grade will be termed as back-log course(s).

6 Result and Grade Point Calculation

6.1 SGPA will be calculated as per courses registered and credits earned in the term, SGPA will be Term basis (*Excluding Additional learning courses*)

SGPA (Si) =
$$\Sigma$$
(Ci x Gi) / Σ Ci

where Ci is the number of credits of the ith course and Gi is the grade point scored by the student in the ith course.

6.2 CGPA will be cumulative grade points (*Excluding Additional learning courses*) earned till that term.

$$CGPA = \Sigma(Ci \times Si) / \Sigma Ci$$

where Si is the SGPA of the ith semester and Ci is the total number of credits in that Term.

7 Grade Improvement

- 7.1 Grade Improvement possible for those who have CGPA less than 6.75 and can be offered for maximum two courses from V term onwards.
- 7.2 In case a student wants to improve his/her grade point in a course, he/she can improve it only by appearing in the End Term Examination of the same course as per examination rules.

8 Transcript

After successful completion and award of degree (number of courses and credits) transcript may be issued to the student as per scheme of a program.

9 Placement

Minimum 100 credits are required for the placement purpose or based on the company criteria.

10 Minimum and Maximum Duration / NFTE

- 10.1The minimum duration of UG program will be 3.5 Years (for fast learner) and 4 years for others.
- 10.2 Maximum Duration for the Completion of the B. E. Degree shall be six year or as per the decision of academic council/regulatory authority time to time.
- 10.3After completion of maximum duration if candidate fail to earn required credit shall be considered as Not Fit for Technical Education (NFTE)

11 Summer Term

- 11.1Summer Term is to provide opportunity to students to clear their backlogs or detained students or the courses which he / she could not register for some reason. The Institution may use this semester to arrange add-on courses for regular students and/or for deputing them for practical training.
- 11.2Those students who have secured the "FF" grade in End Sem. Examination / Vacation Examination but will like to learn the subject once again and/or wish to revise their marks of CAE/TAE will be permitted to register for the Summer Term.
- 11.3The students who have earlier taken an End Sem. Examination and register afresh for the Summer Term will sign an undertaking to revoke the CAE / TAE marks secured by them in their regular/ earlier attempt in the same subject. Once revoked, the students shall not seek restoration of the CAE/TAE marks.
- 11.4 Those students who are willing to join the Summer Term will submit the "Willingness to join" in the prescribed format 15 days before the commencement of the Summer Term.
- 11.5 Students will not be permitted to register for more than twenty four credits in the Summer Term.
- 11.6 Summer Term will be at an accelerated pace and will be at double the rate of normal semester e.g. one credit of course shall require two hours/week so that the total contact hours are maintained same as in normal semester.

- 11.7 Student shall register for the Summer Term as per the schedule given in academic calendar.
- 11.8 A student will have to pay an additional fee, if any, prescribed by the Institution within the stipulated time.
- 11.9 Once registered, students will not be allowed to withdraw from a summer term.
- 11.10 Summer Term is a special semester and students cannot demand it as a matter of right. Minimum batch size to be required.
- 11.11 It is optional for a student to make use of summer semester.