Proposed Draft of ORDINANCE No. -12

for

Bachelor of Technology (B.Tech.) Under Choice Based Credit System

Governing the award for the Degree of Bachelor of Technology (B.Tech.)-4 years (8 Semester) Degree Course

(Ordinance prepared as per the provisions given in Statute 28(1) (b) of The Central Universities Act, 2009)

1.0 TITLE AND COMMENCEMENT

- **1.1** The Ordinance shall be called as Ordinance for four years (Eight Semesters) B.Tech. Degree programme.
- **1.2** The first degree of four years (Eight Semester) programme in Engineering & Technology, hereinafter called 4- year B. Tech degree course, shall be designated as 'Bachelor of Technology' in respective Branches. The conduct of the programme and the performance evaluation of B. Tech. programmes are on the basis of percentage of marks earned as well as credit system.
- **1.3** This ordinance will come into force from the Academic Session commencing after the date of notification issued by the University and shall replace the existing ordinance.

2.0 DEFINITION & KEY WORDS

- **2.1** "Vishwavidyalaya" or "University" means Guru Ghasidas Vishwavidyalaya (A Central University established by the Central Universities Act, 2009 No. 25 of 2009) located at Koni, Bilaspur, Chhattisgarh.
- 2.2 "Student" means one who has been admitted in the four years B.Tech. programme of this University through merit list of Joint Entrance Examination (JEE) (main) or any other procedure decided by Guru Ghasidas Vishwavidyalaya for Admission to B. Tech. degree course time to time.
- **2.3** The candidate shall be eligible for admission on the basis of the "Academic Year" means two consecutive (one odd and one even) semesters.
- **2.4** "Choice Based Credit System (CBCS)" means a program that provides choice for students to select from the prescribed courses (Basic Science, Humanities, Engineering Science,

- Mandatory Courses, Professional Core, Open Elective, Professional Elective, etc.) as per the guidelines issued by UGC / AICTE / regulatory bodies where ever applicable and as approved by the appropriate bodies of the University.
- **2.5** "Course" means "papers" through different modes of delivery and is a component of a programme as detailed out in the respective program structure.
- **2.6** "Credit Point" means the product of grade point and number of credits for a course.
- 2.7 "Credit" means a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture, seminar or tutorial) per week or two hours of practical work/field work/project etc. per week. The number of credits for each course shall be defined in the respective examination scheme.
- **2.8** "Cumulative Grade Point Average (CGPA)" means a measure of overall cumulative performance of a student in all semesters. The CGPA is the ratio of total credit points secured by a student in various courses registered up to the semester concerned and the sum of the total credits points of all the registered courses in those semesters concerned. It is expressed up to two decimal places.
- **2.9** "Grade Point" means a numerical weight allotted to each letter grade on a 10 point scale or as prescribed by the AICTE/ University from time to time.
- **2.10** "Letter Grade" means an index of the performance of students in a course. Grades are denoted by letters O, A+, A, B+, B, C, P, and F.
- **2.11** "Semester Grade Point Average (SGPA)" means a measure of performance of a student in a particular semester. It is the ratio of total credit points secured by a student in various courses registered in a semester and the total credits of all courses in that semester. It shall be expressed up to two decimal places.
- **2.12** "Semester" means an academic session spread over 15-18 weeks of teaching work with minimum 90 teaching days. The odd semester may normally be scheduled from July to December and even semester from January to June.
- **2.13** "Grade Card" means a certificate based on the grades earned. Grade card shall be issued to all the students registered for the examination after every semester. The grade card will contain the course details (code, title, number of credits, grade secured) along with SGPA of

the semester and CGPA earned till that semester. The final semester grade card shall also reflect the cumulative total of marks obtained by the student in all semesters out of maximum marks allocated for which the grades of the program were evaluated. However, the final result will be based on the grades/CGPA.

- **2.14** "*Transcript*" means a certificate issued to all enrolled students in a program after successful completion of the program. It contains the SGPA of all semesters and the CGPA;
- **2.15** "*Ex-student*" means a student who fails to clear in the supplementary examination all the backlogs of theory, practical / sessional subjects of the odd and even semesters, he/she will not be promoted to the odd semester of the next higher year, and such student shall be treated as ex-student.
- **2.16** "Sessional" means a subject which is practiced by student in a semester for which there is no end semester exam.

3.0 DURATION

The duration of undergraduate (U.G.) degree programmes leading to B. Tech. degree, shall be normally four years and the maximum duration shall be 7 years from the date of initial registration in First year B.Tech. course. If a candidate will not be able to complete the course in the maximum duration of 7 years then he / she will not be eligible to continue the course from that point of time itself and he / she will automatically exit from the program.

4.0 ADMISSION PROCEDURE AND ELIGIBILITY

The minimum qualification for admission to the first year B. Tech. shall be the passing of Higher Secondary School Certificate Examination (10+2) scheme with Physics, Chemistry and Mathematics conducted by Central Board of Secondary Education or any other equivalent examination from recognized Board or University. The candidate shall be eligible for admission on the basis of the merit list of Joint Entrance Examination (JEE) (main) or any other procedure decided by Guru Ghasidas Vishwavidyalaya for Admission to B. Tech. degree course time to time. In general the admission to B. Tech. degree course shall be governed by the rules of, MHRD, Government of India (GoI) and Guru Ghasidas Vishwavidyalaya.

The reservations in admission, cancellation of admission and fee refund will be as per MHRD, GoI / GGV norms and notifications issued in this regard from time to time.

5.0 ENROLMENT IN THE UNIVERSITY

Every student admitted to the programme shall be enrolled before appearing in the first semester examination through the procedure prescribed by the competent authority from time to time.

6.0 TYPES OF COURSES

Basic Science, Humanities, Engineering Science, Mandatory Courses, Professional Core, Open Elective, Professional Elective, etc. as per the guidelines issued by AICTE / University where ever applicable and as approved by the appropriate bodies of the University.

7.0 ATTENDANCE AND ELIGIBILITY TO APEAR IN THE EXAMINATION

A Student shall be required to attend at least 75% of the classes actually held in the semester which may include theory class, seminars, sessionals, practicals, projects, as may be prescribed. Provided that the Dean of the School of Engineering & Technology on the recommendations of the concerned Head of the Department may condone the shortage in attendance of those students who have secured at least 65% attendance. This condonation should not exceed 10% on the following satisfactory grounds.

- (a) Illness / Medical leave of the student certified by the University Medical Officer / Government Doctor.
- (b) Unforeseen miss happening with parents.
- (c) For participating in the extra and co-curricular events with prior approval from the university authority.
- (d) For participating in the sports activity with prior approval from the university authority.
- (e) For attending in interviews with valid proof and prior permission of the concerned head of department.
- (f) Natural calamities.

The application must be supported by such documents as considered to be fit for granting such condonation.

7.1. A student who does not satisfy the requirement of attendance as per clause above, he/she will be detained due to shortage of attendance in a particular semester and he/she will have to repeat the same semester taking re-admission as a regular student in the next commencing academic session by paying fee as per the University norms.

8.0 EXTRA ORDINARY LONG ABSENCE

If a student does not participate in the academic activities of the School of Studies of Engineering and Technology of this Vishwavidyalaya for a period exceeding two years for reasons of ill health or medical grounds only, he / she shall neither be permitted to appear in any subsequent examinations nor shall be admitted or promoted to any semester and he / she shall cease to be a student of B. Tech. Degree Course. Here participation in academic activity means attending Lectures, Tutorials, Practicals/Sessionals and such other activities declared as academic activities.

9.0 MEDIUM OF INSTRUCTION/EXAMINATION

Medium of instruction and examination shall be English only.

10.0 EXAMINATION AND EVALUTION

- 10.1 Practical/ Sessional Work The student shall be required to complete the Laboratory / Drawing / Design / Job preparation and other academic work assigned for that semester in the session.
- **10.2** There shall be a full End Semester Examination at the end of each semester consisting of theory papers, practicals/ sessionals.
- 10.3 There shall be one End Semester Examination (ESE) at the end of each semester conducted by Guru Ghasidas Vishwavidyalaya. Only those students, who will satisfy the attendance requirement to be eligible to appear at the End Semester Examination as per clause 7.0, will be permitted to appear in the End Semester Examination. The examination will consist of theory papers, laboratory practical/sessional and viva-voce as per the scheme of examination of that semester. These examinations shall be designated as follows.

(a). During First year
 I & II sem. B. Tech. Examination
 (b). During Second year
 III & IV sem. B. Tech Examination

(c). During Third year - V & VI sem. B. Tech. Examination

(d). During Fourth year - VII & VIII sem. B. Tech. Examination

10.4 The semester examination will normally be held in the month of November-December and April – May in every academic session, or as decided by the University from time to time.

- **10.5** Supplementary examination will be held only once in a year (for both even and odd semesters) normally in the month of June/July or as decided by the University from time to time.
- **10.6** End Semester Examination time table shall be declared by the Controller of Examination before the commencement of examination.

10.7 Basis of Subjects Evaluation

- 10.7.1 For passing in a subject (theory / practical/sessional) the performance of the candidate in each semester shall be evaluated subject wise. There shall be continuous assessment throughout the semester by conducting class tests, called as Internal Assessment (I.A.) carrying 30% weightage, and End Semester Examination (E.S.E.) carrying 70% weightage. A student has to secure minimum 35% (24 marks) in the particular theory subject and minimum 40% marks in a particular practical subject to pass that subject in the end semester examination. For each practical/sessional subject 60% weightage will be given to the actual practicals /sessionals performed during the semester I.A. and 40% weightage will be given to the End Semester Examination (ESE).
- 10.7.2 For evaluation of end semester practical/sessional examination of a subject, there shall be two examiners, one internal examiner who has conducted the practical in that semester and other external examiner to be appointed by the Head of the Department from amongst faculty members of the department concerned.
- **10.7.3** To allot the marks of Internal Assessment (IA), there shall be two Class Tests (CT) I & II each of 15 marks.
- **10.7.4** For passing a subject the student is required to fulfill the following conditions:
 - (a) Student has to secure minimum 35% (24 marks) in a particular theory subject to pass that subject in the end semester examination.
 - (b) Student has to secure minimum 40% marks in a particular practical / sessional subject to pass that subject (practical / sessional) in the end semester examination.
 - (c) Must have secured minimum 40% marks (Marks of Internal Assessment + Marks of End Semester Examination) for each theory subject.
 - (d) Must have secured minimum 50% marks (Marks of Internal Assessment + Marks of End Semester Examination) for each project/practical/sessional subject.
 - (e) Must have scored minimum SGPA of 5.0 in the semester. If a student has cleared all the Theory and Practical/Sessional subjects of one or and both semesters of a year, but has

failed to secure SGPA of 5.0 in the semester or and semesters of a year then he/she will be allowed to re-appear in the supplementary Examination in those subjects in which the student's Grade Points less than 5. If the student fails to secure SGPA of 5.0 even in the supplementary examination, he/she will not be promoted to the odd semester of the next higher year, and such student shall be treated as an ex-student. Other condition of promotion of the ex-student will be applicable as per Clause 11.

- (f) If a student has passed a semester examination in all the subjects as per clause 10.7.4 (a-e), he/she shall not be permitted to reappear in that examination for improvement in grades/division.
- **10.7.5** *Basis of Credits-* Credit of a theory or practical/sessional subject is decided by:

Credit =
$$(L+T+P/2)$$
,

Where; L = Lecture periods per week,

T = Tutorial period per week,

P = Practical/Sessional periods per week.

Credit in a subject will be an integer, not in a fractional number. If a credit in a subject turns out in fraction, it will be taken as next integer number.

- **10.7.6** *For Theory Subjects*-For the assessment of performance of students in a semester, continuous evaluation system will be followed with two components: Internal Assessment (IA), carrying 30% weightage and End Semester Examination (ESE), carrying 70% weightage. There will be two class tests each of 15 Marks, in each theory subject in a semester forming the part of Internal Assessment (IA).
- 10.7.7 For Projects/Practical/ Sessional Subjects- Evaluation of project/practical/sessional during the semester will carry 60% weightage for Internal Assessment (IA) and the End Semester Examination (ESE) will carry 40% weightage. The internal assessment will carry equal weightage of attendance (20% weightage), practical records (20% weightage) and internal viva voice examination (20% weightage). The marks for attendance shall be awarded in project/practical/sessional subject as per the following Table.

Percentage of attendance	65 - ≤ 75	> 75 - \le 80	>80- ≤ 85	>85-≤90	>90-≤95	>95-≤ 100
Percent weightage of	10	12	14	16	18	20
Marks						

10.7.8 *Grading System-* Percentage as well as absolute grading system will be followed, in every subject, theory or practical/sessional. A student will be awarded a **Letter Grade**, based on his combined performance of Internal Assessment (IA) and End Semester Examination (ESE). These grades will be described by letters indicating a qualitative assessment of the student's performance through a number equivalent called "Grade Point" (GP) as given below. The following is the **Grade Point** pattern. Grade 'F' indicates not clearing (passing) of the subject.

Letter Grade (LG)	О	A+	A	B+	В	С	P	F	Ab
Grade Point	10	9	8	7	6	5	4	0	0

The Letter Grades are O (Outstanding), A+ (Excellent), A (Very Good), B+ (Good), B(Above Average), C (Average), P (Pass), F(Fail) and Ab (Absent in end semester examination). Grades will be awarded for every theory and practical/sessional subject separately.

10.7.9 Absolute Grading System

(a) The Absolute Grading System as explained below will be adopted for theory and project/practical/sessional subjects.

	Percentage of Marks Obtained				
GRADE	THEORY	PRACTICAL/SESSIONAL/PROJECT			
O (Outstanding)	>90-≤100	>90-≤ 100			
A ⁺ (Excellent)	>80 - ≤ 90	>80-≤ 90			
A (Very Good)	>70 - ≤ 80	>70 - ≤ 80			
B ⁺ (Good)	>60 - 70	>60- ≤ 70			
B (Above Average)	>50-≤ 60	>55- ≤ 60			
C (Average)	>40-≤ 50	>50-≤ 55			
P (Pass)	=40	=50			
F (Fail)	00 - <40	0 - < 50			

(b) 01 Grace Mark shall be given only once at the time of award of the degree to improve the Grade in overall result.

10.7.10 *Semester Grade Point Average (SGPA)*- Performance of a student in ith semester is expressed by [SGPA]_i which is a weighed average of course grade points obtained by a student in the semester, and is expressed by

$$[SGPA]_{i} = \frac{[C_{1}G_{1} + C_{2}G_{2} + \dots]_{i}}{[C_{1} + C_{2} + \dots]_{i}} = \frac{[\sum C_{j}G_{j}]_{i}}{[\sum C_{i}]_{i}} = \frac{N_{i}}{D_{i}}$$

Where C_j stands for Credit and G_j stands for Grade points corresponding to j^{th} subject in a semester. SGPAs will be calculated up to two places of decimal without rounding off. SGPA will be calculated only when a student clears a semester without failing in any subject, theory or practical/sessional/project.

10.7.11 *Cumulative Grade Point Average (CGPA)*- This is a weighed average of course grade points obtained by a student for all the courses taken, since his / her admission. Thus, CGPA in the ith semester with " $i \ge 2$ " will be calculated as follows:

$$[CGPA]_{i} = \frac{\sum_{k=1}^{k=i} N_{k}}{\sum_{k=1}^{k=i} D_{k}}$$

If a student repeats a course or is declared fail in a subject, then only the grade points earned in the attempt when he / she cleared the course (subject) are counted towards CGPA. CGPA will be calculated in every semester along with SGPA, so that a student knows his / her latest CGPA.

11 PROMOTION TO NEXT YEAR AND SEMESTER

11.1 Those students who have cleared all the registered theory, practical/sessional subjects prescribed for the B.Tech. first year shall be promoted to the B.Tech. second year. Those students who have cleared all the registered theory, practical/sessional subjects prescribed for the B.Tech. second year shall be promoted to the B.Tech. third year. Those students who have cleared all the registered theory, practical/sessional subjects prescribed for the B.Tech. third year shall be promoted to the B.Tech. fourth year.

11.2 Supplementary examinations will be held only once in a year (for both even and odd

semesters) normally in the month of July after declaration of results of even semester

examination of the incumbent session, or as decided by the University time to time.

11.3 Those students who would have backlogs in registered theory and/ or practical/ sessional

subjects in the odd and or even semesters of any academic year will be allowed to appear in

the supplementary examinations of the same year.

11.4 Those B.Tech. students who are allowed to appear the supplementary examination (of odd

or even or both semester), may be allowed to attend the classes provisionally of the next

higher odd semester of the next year. However, such provisionally permitted students will

get their regular admission only after passing in all their backlog papers in supplementary

examination, if eligible otherwise. The percentage of attendance shall be counted from the

date of commencement of the semester classes.

11.5 If a student fails to clear in the supplementary examination all the backlogs of theory,

practical/sessional subjects of the odd and even semesters, he/she will not be promoted to

the odd semester of the next higher year, and such student shall be treated as ex-student.

11.6 Ex-students, {as per clause 10.7.4(e)}, shall be required to clear their backlog papers

(theory and or practical/sessional subjects), in the end semester examination of the

corresponding semesters (odd and even) and supplementary examination to be conducted

next year (in the following academic session). Such ex-students will be required to deposit

the examination fees only.

11.7 If a student fails to appear in the internal assessment / sessional of a semester due to

unforeseen incident, a makeup test/examination may be conducted, if required, strictly on

the recommendation of the concerned Head of the Department, and approval of the Dean

(Engineering & Technology).

12 AWARD OF CLASS OR DIVISION

12.1 The class/division awarded to a student with B. Tech. Degree shall be determined by the

student's CGPA after clearing all the subjects of all the eight semesters, as given below:

• First Division with Distinction or **Honours**

: $7.5 \le CGPA \le 10.0$

• First Division

: $6.5 \le CGPA < 7.5$

• Second Division

 $: 5.0 \le CGPA \le 6.5$

12.2 Division shall be awarded to a student only after clearing all the eight semesters successfully, and having earned at least total credit of **160** for the award of B.Tech. degree. It shall be based on the integrated performance of the candidate for all the eight semesters

as per clause 10.3.

12.3 No student shall be declared to have passed the final B.Tech. course unless he/she has fully passed all the eight semesters. The results of the eighth semester of those students, who have not passed examination in any previous semester, will be withheld. Such students shall be deemed to have passed the final B.Tech. examination in the year in which they pass / clear all the subjects of all the eight semesters, within the limit of the prescribed

period of the whole course.

13 TRANSCRIPT

Based on the Letter grades, grade points and SGPA and CGPA, the Vishwavidyalaya shall issue the transcript for each semester and a consolidated transcript indicating the performance in all

semesters.

14 CONVERSION OF CGPA / SGPA IN PERCENTAGE

There is no equivalence between the CGPA/SGPA scale and percentage. However notionally,

Percentage of particular semester $= (SGPA) \times 10$

Percentage of B.Tech. Degree $= (CGPA) \times 10$

15 RANKING

Only such candidates who complete successfully all courses in the programme in single attempt shall be considered for declaration of ranks, medals etc declared and notified by the university, if any.

16 DISCIPLINE

• Every student is required to observe discipline and decorous behavior both inside and outside the campus and not to indulge in any activity which will tend to bring down the prestige of the

Institute.

 Any act of indiscipline of a student reported to the concerned Head / Dean (Engineering & Technology), will be investigated and necessary action will be taken as per university rules

from time to time.

• Ragging of any dimension is a criminal and non-bailable offence in our country. The current State and Central legislations provide for stringent punishment, including imprisonment. Once the involvement of a student is established in ragging, the offending student will be dismissed from the University and will not be admitted into any other Institution. Avenues also exist for collective punishment, if individuals can not be identified in this inhuman act. Every senior student, along with the parent, shall give an undertaking every year in this regard and this should be submitted at the time of admission / registration.

17 REGISTRATION REQUIREMENTS

- Every student is required to be present and register at the commencement of each semester on the day(s) fixed for and notified in the Academic Calendar from time to time.
- Late registration will be permitted with a fine as decided from time to time up to three weeks from the date of commencement of each semester as notified in the Academic Calendar from time to time. If the student does not register in the specified time he / she has to be registered in the next year in the same semester.
- Percentage attendance for all students will be counted from the date of commencement of the semester, irrespective of his/her date of registration. However, in case of first year first semester, attendance will be counted from date of admission into the School or date of commencement of class work, whichever is later.
- Minimum 4 weeks Industrial training/Internship in during summer break is compulsory after
 end semester examination of sixth semester. The student has to submit the industrial training /
 Internship report to the concerned department at the time of registration in the seventh
 semester and required to defend his/her industrial training/Internship during seventh semester
 in the department.
- If a student finds his/her academic/course load heavy in any semester, or for any other valid reason, he/she may drop courses within 15 instructional days from the commencement of the semester with the recommendation of his/her Head of Department and approval of the Dean, Engineering & Technology.
- The curriculum for any semester, except for the final semester will normally carry credits between 21 to 29.
- Minimum number of credits that a student can register in any given semester (excepting for final semester) is 15. Maximum number of credits that can be registered in a semester is 29.

However, in the final semester, a student may earn less than 15 credits if it is sufficient for him/ her to fulfill the requirements for the award of the degree.

• A student who has successfully secured *CGPA* equal and more than 7.0 in his/her First Year courses, can be registered for non credit courses in other departments of the university for his/her higher semesters of study. The registration in non credit courses will be done after recommendation of Head of the Department and approval of the Dean, Engineering & Technology followed by the same of the Head of the Department concerned of the non credit course offered in. The student has to attend the classes of the non credit courses in addition to the fulfilling the requirements of registered regular subjects in his/her department prescribed by the Head of Department. For non credit courses "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

18 TRANSFER OF CREDITS

With due approval the courses studied through on line / off line like Massive Open online Courses (MOOCS) through National Programme on Technology Enhanced Learning (NPTEL) under Study Webs of Active —Learning for Young Aspiring Minds (SWYAM) in Indian/ Foreign University/Institutions by the students during their study period at GGV Bilaspur (C.G.) may count towards the credit requirements for the award of B.Tech. degree. The credit transferred will reduce the number of courses to be registered by the student at GGV. The guidelines for such transfer of credits are as follows.

- On successful completion of the courses opted by students under SWYAM, the credits earned by them shall be included in their Grade card.
- Credits transferred will not be used for SGPA/CGPA computations except SWYAM.
 However, credits transferred will be considered for overall credits requirements of the programme.
- Students can earn credits only from other department of the University (GGV) / IISC/IITs/NITs/Central Universities and other Indian and Foreign Institutions/Universities with which GGV has an MOU (and that MOU must have specific clauses for provisions of credit transfer by students).
- Credit transfer can only be considered for the courses at same level (i.e., UG, PG, etc.).

• The credits / grades indicated in the grade sheet obtained from the university in which the student has completed the courses should be used by the student as part of his/her transcripts.

19 INTERPRETATION OF REGULATION

In case of any dispute in the matter of interpretation of this Ordinance, the decision of the Vice-Chancellor of the University shall be final and binding on the students.

20 POWER TO MODIFY

Notwithstanding all that has been stated above, the Academic Council of the University has the right to propose any modifications or amendments to the Executive Council for final decision of the above regulations and further actions from time to time.

21 Matters not covered in this Ordinance shall be governed by the relevant ordinance of the University.