



**CHHATTISHGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY,  
BHILAI**

**Established under Act No. 25 of 2004**

**Ordinance No. 14**

**Under Section 38 (2 and 3)**

**Ordinance for B.E. 4 year Degree course**

**1.0** The first degree in Engineering of four-year (eight semester) course, hereinafter called 4-Year Degree Course, shall be designated as BACHELOR OF ENGINEERING, in respective Branch.

1.1 This degree of B.E. shall include the branches of Engineering prevalent in the university or affiliated colleges.

1.2 The studies and examinations of these B.E. courses shall be on the basis of percentage as well as credit system.

**2.0 ADMISSIONS**

2.1 The minimum qualification for admission to the first year B.E. shall be the passing of Higher Secondary School Certificate Examination (10+2) scheme with Physics, Chemistry and Mathematics conducted by C.G. Board of Secondary Education or an equivalent examination from a recognized Board/University.

2.2 Candidates who have passed the Diploma course in related branch of engineering from a recognized Board of Technical Education/University shall also be eligible for admission to first semester of B.E. course, provided they are domicile of Chhattisgarh.

2.3 Candidates who have passed the Diploma Examination in the first division from a recognized Board of Technical Education/University in appropriate branch of engineering shall be eligible for admission to the Third semester (second year of 4-YDC), provided that they are domicile of Chhattisgarh. However, the candidate will be required to pass the subject of Physics, Chemistry and Maths of B.E. I year before admission to VI Semester.

2.4 Non-Resident Indian (NRI) candidates shall also be eligible for admission to B.E. as according to the directives of the Government of Chhattisgarh, provided they satisfy the criterion of clause 2.1 above.

2.5 The eligible candidates as specified in clause 2.1 and 2.2 above should secure a place in the merit list of CG-PET/AIEEE, Raipur for admissions to B.E. In

general, the admissions to B.E. course shall be governed by the rules by Directorate of Technical Education or any other competent authority of the State Government of Chhattisgarh.

### 3.0 EXAMINATIONS

3.1 *There will be one University Examination at the end of each semester. These examinations will be designated as follows.*

(a) *During First Year*

- *First Semester B.E., Exam, Second Semester B.E., Exam*

(b) *During Second Year*

- *Third semester B.E. Exam, Fourth semester B.E. Exam*

(c) *During Third Year*

- *Fifth semester B.E. Exam, Sixth semester B.E. Exam*

(d) *During fourth Year*

- *Seventh semester B.E. Exam, Eighth semester B.E. Exam*

3.2 *The semester examination will generally be held in Nov-Dec. and April- May in each year.*

3.3 *There will be a full examination at the end of each semester consisting of theory papers and the laboratory practicals of all semesters. The duration of examination period normally should not exceed 20 working days."*

3.4 *A candidate who has been admitted in the Engineering course will be promoted to the higher class in accordance with the following sub rules:-*

3.4.1(a) *Candidate who has taken admission in A-B Group and has appeared in the examination of odd semester of a particular year will automatically be promoted to even semester of that year irrespective of failing in any number of theory or practical of previous semester.*

3.4.1(b) *A candidate who has taken admission in even semester under B-A Group and has appeared in the examination of even semester will automatically be promoted to next applicable odd semester irrespective of failing any numbers of theory or practical of previous semester.*

**Note:** *The candidate who seeks admission in odd semester of an academic year is said to be in A-B group while a candidate who seeks admission in even semester of an academic year is said to be in B-A group. i.e. a Candidate of A-B Group will take admission in July where as candidate of B-A Group will take admission in January in the relevant academic year.*

3.4.1 (c) *A candidate getting detained due to shortage of attendance or failing in sessional in a particular semester will have to repeat the same semester which shall commence after about a year as a regular candidate. However*

he/she can take admission in the next higher semester. Thereafter, the candidate will be subjected to change of group i.e. from A-B to B-A or vice-versa as mentioned in para 3.4.1(a) & (b).

3.4.2 A candidate offering seventh semester after eighth (B-A group) will not be issued any mark sheet or Provisional certificate after eighth semester until he/she has passed all the semesters.

3.5 **\*\*A candidate shall not be admitted in the fifth and higher semester examinations. If the No. of backlog papers are more than as given in the table below:**

Semesters	Permissible backlog and semester wise division of backlog papers			
	1 <sup>st</sup> sem	2 <sup>nd</sup> sem	3 <sup>rd</sup> sem	4 <sup>th</sup> sem
5 <sup>th</sup> semester	3	NA	NA	NA
6 <sup>th</sup> semester	3	3	NA	NA
7 <sup>th</sup> semester	3	3	3	NA
8 <sup>th</sup> semester	3	3	3	3

3.6 **\*\*A candidate directly admitted in third semester through lateral entry after passing diploma shall not be admitted in fifth and higher semester examination. If No. of total backlog papers are more than as given in the table below:**

Semesters	1 <sup>st</sup> sem	2 <sup>nd</sup> sem	3 <sup>rd</sup> sem	4 <sup>th</sup> sem
5 <sup>th</sup> semester	(The subjects of of B.E. 1 <sup>st</sup> year as mentioned in 2.3)			
6 <sup>th</sup> semester		04	NA	NA
7 <sup>th</sup> semester		02	3	NA
8 <sup>th</sup> semester		02	3	3

3.7 If a candidate is failing in any one or more TA (Teacher's Assessment), he/she will not be eligible to appear in ESE (End Semester Exam) thus will have to repeat the semester, and will be perusing BA system instead of AB system or vice-versa.

## 4.0 PASSING EXAMINATIONS

### 4.1 BASIS OF MARKS

4.1.1 The performance of a candidate in each semester shall be evaluated subject-wise, with a maximum of 80 marks for Theory, 40 marks for Practical subjects and 20 marks for the teacher's assignment.

4.1.2 *There shall be Class test (CT) and End Semester Examination (ESE) and Teacher's Assessment (TA) for each Theory paper and ESE and TA for each practical with the following distribution and passing standards.*

<b>Name of Examination</b>	<b>Minimum Passing Marks</b>
{ Class Test (CT) Theory (College level)	NIL
{ End Semester Exam (ESE) Theory (University level)	35%
{ Practical (University level)	50%
{ Teacher's Assessment (TA) of Theory & Practical	60% each
Total of ESE, CT & TA in Theory	35%
Practical	50%

4.1.3 For the evaluation of End Semester Exam in Practicals, one external examiner shall always be there from outside the College/Institution and one internal examiner from the College/Institution.

4.1.4 There will be at least two class tests in each theory subject in a semester. Teacher's assessment in each theory and/or practical will be based upon home assignments, quizzes, take home tests, viva-voce, attendance, group discussion, tutorials etc.

## **4.2 BASIS OF CREDITS**

4.2.1 One period of contact in lecture (L) and two periods of contact in tutorial (T) or practical (P) will be equal to one credit. Thus,  $\text{Credit} = \{ L + (T+P)/2 \}$ . Credit in a subject will be a full, not in a fractional number. If a credit in a subject turns out in fraction than it will be taken as next full number.

4.2.2 A candidate shall earn all the credits allotted to a semester only when he/she passes the said semester.

## **5.0 DURATION OF A SEMESTER**

5.1 There shall be normally fourteen weeks of teaching in every semester.

5.2 A candidate may provisionally continue his/her studies in higher semester class after the examinations of the semester he/she appeared is over. However, his/her eligibility shall be evaluated only after the results of semesters as per clause 3.5 are declared at which he/she had appeared.

## 6.0 MERIT LISTS

- 6.1 Merit list of top 10 candidates in the order of merit shall be declared at the end of each semester in each branch from amongst the candidates who have passed in first attempt.
- 6.2 Branchwise final merit list shall be declared by the University only after the main examination of the eighth and final semester for B.E. degree, on the basis of the integrated performance of all the four years. The merit list shall include the first ten candidates securing at least First Division and passing all semesters in single attempts.

## 7.0 ATTENDANCE

- 7.1 Candidates appearing as regular students for any semester examination are required to attend 85 percent of the lectures delivered and of the practical classes held separately in each subject of the course of study, provided that a short fall in attendance upto 10% and a further 5% can be condoned by the principal of the college and Vice-Chancellor of the University respectively for satisfactory reasons.
- 7.2 **\*\*\*A candidate who fails to secure the attendance below 70% (including the concession contained in clause 7.1 above) shall be liable to be detained by a general or a special order of the Vice Chancellor or the Principal as the case may be, from taking semester examination and will be required to take re-admission in same semester whenever the semester classes commence.**

- 8.0 If a candidate has passed a semester examination in full he/she shall NOT be permitted to reappear in that examination for improvement in division/marks or any other purpose.

## 9.0 ASSESSMENT AND GRADING

### 9.1 MODE OF ASSESSMENT AND EVALUATION

Continuous evaluation system will be followed with three components as Class Test (CT), Teacher's Assessment (TA) and End Semester Exam (ESE). To make TA more objective one, this will depend upon attendance, home assignments, take home exam, closed and open book tests, group assignments, viva-voce, quizzes etc. Similarly, there will be two or three class tests in a semester the results of which will be shown to the class students along with test answer books under intimation to the University. However, ESE will have to be conducted by the college/institute through affiliating university. Weightings of CT, TA and ESE will be as given in the scheme of examination.

### 9.2 GRADING SYSTEM

Percentage as well as absolute grading system will be followed. In every subject, theory or practical, a candidate will be awarded a letter grade based on one's combined performance of all the components, e.g., TA, CTs and ESE. These grades will be

described by letters indicating a qualitative assessment of the candidate's performance through a number equivalent called "Grade Point" (GP) as given below. A course is completed successfully, or a credit is earned for a course when letter grade C or better is obtained in the course.

Letter Grade (LG) :	A+	A	B+	B	C+	C	F
Grade Point (GP) :	10	9	8	7	6	5	0

Grades will be awarded for every subject, theory and practical separately. This will be done as described below.

### 9.3. ABSOLUTE GRADING SYSTEM

The absolute grading system of the type explained below will be adopted for theory and practical subjects

Grades	THEORY	PRACTICAL
A+	$85 \leq \text{Marks} \leq 100\%$ ,	$90 \leq \text{Marks} \leq 100\%$ ,
A	$75 \leq \text{Marks} < 85\%$ ,	$82 \leq \text{Marks} < 90\%$ ,
B+	$65 \leq \text{Marks} < 75\%$ ,	$74 \leq \text{Marks} < 82\%$ ,
B	$55 \leq \text{Marks} < 65\%$ ,	$66 \leq \text{Marks} < 74\%$ ,
C+	$45 \leq \text{Marks} < 55\%$ ,	$58 \leq \text{Marks} < 66\%$ ,
C	$35 \leq \text{Marks} < 45\%$ ,	$50 \leq \text{Marks} < 58\%$ ,
F	$0 \leq \text{Marks} < 35\%$ ,	$0 \leq \text{Marks} < 50\%$ ,

Thus letter grades A+, A, B+, B, C+, C, and F and the corresponding Grade Point will be available for each subject evaluated by the examiner.

### 9.4 FAIL GRADE "F"

Additionally, further categorizations of F will be

FF : Failing in any theory/practical subject.

FI : Incomplete grade failing to appear in ESE due to illness or so but otherwise satisfactory performance, thus eligible for re-exam in that subject.

FS : Failing in sessionals, i.e. in TA, so repeat the semester.

FX : Failing due to short of attendance so repeat the semester.

WW : Result withheld due to various reasons.

FA : Failing due to aggregate marks being less than 50% of total marks, so eligible to appear in one or two subjects (theory only) of one's choice.

### 9.5 CONSTRAINTS OF MINIMUM QUALIFYING MARKS

To be eligible to secure a letter grade A+ to C a candidate must

- be eligible to appear in a ESE, a candidate must score minimum 60% marks in TA in each theory and/or practical separately failing which he/she will have to repeat the semester.
- No minimum score requirement of marks in CTs.
- Minimum score 35% marks in each theory paper,

- Minimum score 50% marks in each practical exam,
- Minimum score 50% of total aggregate marks.

**9.6 SEMESTER PERFORMANCE INDEX (SPI)**

Performance of a student in i-th semester is expressed by SPI which is a weighted average of course grade points obtained by a student in the semester and is expressed by

$$SPI_i = \frac{[C_1 G_1 + C_2 G_2 + \dots] i}{[C_1 + C_2 + \dots] i} = \frac{[\sum CG] i}{[\sum C] i} = \frac{N_i}{D_i}$$

where C and G stand for Credit and Grade, respectively. SPIs will be calculated up to two places of decimal without rounding off. SPI will be calculated only when a student clears a semester without F in any subject, theory or practical.

**9.7 CUMULATIVE PERFORMANCE INDEX (CPI)**

This is a weighted average of course grade points obtained by a student for all courses taken since his admission to the degree program with 50% weightage of I and II semester marks and 100% for remaining semesters. Thus, CPI in i-th semester with “i” greater than 2 will be calculated as

$$CPI_i = \frac{0.5 (N_1 + N_2) + \sum_{i=3}^{i \geq 3} N_i}{0.5 (D_1 + D_2) + \sum_{i=3}^{i > 3} D_i}$$

If a student repeats a course or is declared fail in a subject, then only the grade points obtained in the latest attempts are counted towards CPI. CPI will be calculated in every semester with SPI, so that a student knows how his CPI is changing.

**9.8. AWARD OF CLASS OR DIVISION**

9.8.1 The class/division awarded to a student with B.E./B. Tech. Degree is decided by the student’s Percentage of Marks as per the following table

- Distinction or Honours : 75% ≤ Mraks ≤ 100%
- Class I : 65% ≤ Mraks < 75%
- Class II : 50% ≤ Mraks < 65%

- 9.8.2 Division shall be awarded only after the eighth and final semester examination, based on integrated performance of the candidate for all the four years.
- 9.8.3 No candidate shall be declared to have passed the final B.E. unless he/she has fully passed all the previous examinations of the eight semesters. The results of the eighth and final semester of those candidates who have not passed examination of any previous semester will be withheld. They, however, will be informed about the deficiency. He/she shall be deemed to have passed the final B.E. examination in the year in which he/she passes all the examinations of all eight semesters.

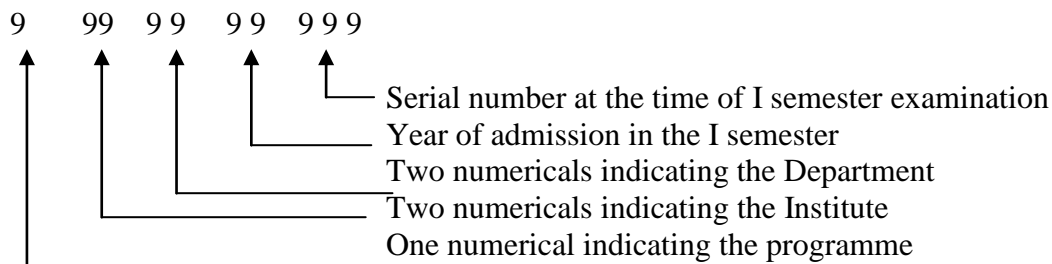
## 9.9 TRANSCRIPT

The transcript issued to a student after completion of the course will contain consolidated record of all the courses taken by the student, grades obtained and the final CPI with class or division obtained.

## 10 ELIGIBILITY OF ADMISSION IN A SEMESTER

A candidate shall be eligible for admission to V, VI, VII and VIII semesters, provided he/she has passed I, II, III and IV semesters, respectively.

- 10.1 **CARRY OVER:** A candidate shall be allowed to carry over all the subjects, i.e. theory and practical of a semester in the higher semester as per section 10 above. He/She shall be required to clear the next ESE only in those subjects (theory/practical) in which he was awarded WW or FI or FF grades.
- 10.2 **ROLL NO.:** Every student will be allotted a unique roll number in the following format till he completes the degree program.



## 11.0 RULES FOR CONDONATION OF DEFICIENCY IN MARKS

With a view to moderate hard line cases in the examination, the following rules shall be observed:

- 11.1 \* **Deficiency up to 5 marks be condoned to the best advantage of the candidate for passing the examination, provided the candidate fails in maximum of two theory, or one theory and one practical or two practicals.**



**This facility shall be available only to those candidates who clear that particular semester examination in full (i.e. in all theory, practicals and sessionals) by availing 5 Grace Marks.**

- 11.2 While declaring result of the candidate, no marks shall be added to or subtracted from the aggregate for the deficiency condoned as above. However, he/she will pass the courses (subjects) cleared through clause 11.1 After condoning the deficiency, the candidate's result shall be declared in the division, for which the aggregate obtained by him/her entitles.
- 11.3 One grace mark will be awarded to the candidate who is failing/missing distinction/missing first division by one mark, on behalf of the Vice-chancellor in the DEGREE examination. This benefit will not, however, be available to a candidate getting advantage under clause 11.1.

## **12.0 RETOTALING OF MARKS AND REVALUATION**

### **12.1 RETOTALING:**

- 12.1.1 Any candidate, who has appeared in an examination conducted by the University, may apply to the Controller of Examination for retotaling of the marks for any one or two theory subjects.
- 12.1.2 Such applications must be made on the prescribed forms along with the requisite fee within 15 days from the date of declaration of result to the respective Principals of the Institution in which the candidate is studying.
- 12.1.3 The work of retotaling i.e. re-totaling does not include re-examination of the answer books. It is done with a view to see whether there has been any mistake in totaling of the marks assigned to individual answers or in the form of omitting the marks assigned to any answer.

### **12.2 \*REVALUATION**

**12.2.1 A regular candidate may apply to the Registrar for revaluation of his/her answer books in the prescribed form within 10 days from the declaration of the result of the regular examination. The revaluation of the answer book will not be applicable for back log papers.**

**Provided that no candidate shall be allowed to avail the facility of revaluation in more than two papers.**

**Provided also that no revaluation shall be allowed in case of scripts of practicals, field work, sessional work tests and thesis submitted in lieu of paper at the examination.**

- 12.2.2 If, on revaluation a mistake in the result originally published is detected, necessary correction shall be notified by the University. In all other cases,

the result shall be communicated to the candidate, as soon as possible through the respective institute.

- 12.3 No retotaling or revaluation shall be allowed in case of practicals, teacher's assessment and class tests by the University.

**\* Approval accorded on 20.04.11 by Chancellor's office**

**\*\* Approval accorded on 05.05.2012 by Chancellor's office**

**\*\*\* Approval accorded on 16.11.2012 by Chancellor's office**