## FACULTY OF ENGINEERING UNIVERSITY OF LUCKNOW ORDINANCES, RULES AND REGULATIONS

For

## **B. Tech.** Programmes

## 1. GENERAL INFORMATION:

- 1.1 The degree of Bachelor of Technology (B. Tech.) of University of Lucknow, Lucknow shall be conferred on the candidates who have pursued the prescribed course of study and have passed the examinations as prescribed in the ordinances. The course will be conducted on full time basis.
- 1.2 Total number of students to the B. Tech, course shall be restricted to numbers decided by the University from time to time in the following branches,
  - 1. Civil Engineering
  - 2. Computer Science & Engineering
  - 3. Electrical Engineering
  - 4. Electronics & Communication Engineering
  - 5. Mechanical Engineering

## 2. ELIGIBILITY FOR ADMISSION:

- 2.1 Admission to B. Tech. First year in First Semester (from 2017-18 and onwards) and lateral entry to B. Tech. Second year in Third Semester (from 2018-19 and onwards) will be made through U. P. State Entrance Examination conducted by AKTU, Lucknow, or as decided by Executive Council of the University.
- 2.2 The minimum academic qualification for appearing in the Entrance Examination will be a pass in the final examination of 10+2 system or its equivalent with Chemistry, Mathematics and Physics or as notified. The candidate should be domiciled of U.P.
- 2.3 For admission to B. Tech. Second year (lateral entry) in third semester, candidate who have passed 3/4 Year Diploma (with minimum 60% marks) from institutions recognized by the U.P. Board of Technical Education in any branch of Engineering /Technology except Agriculture Engineering are eligible.
- 2.4 Up to 5% of the seats may be filled by NRI / direct / sponsored admission. These shall be supernumerary seats. They shall be admitted without any entrance examination on the basis of past academic record as notified. The fee structure for such students will be as notified.
- 2.5 In all cases, the admission of an applicant to the B. Tech, program requires that the applicant has:
  - a. The minimum academic qualification as notified,
  - b. Fulfilled the prescribed admission procedure and paid the prescribed fees.

## **3. ATTENDANCE:**

- 3.1 Students are required to attend 100% classes. Any relaxations in attendance are subject to the satisfaction of concerned HOD/Dean. Normally student shall not be allowed to appear in a semester examination unless he / she has an overall average 75% attendance and 60% attendance in each of the theory / practical subjects in that semester. Attendance for dissertation work shall be verified by the supervisor / guide. However, an additional shortage by an amount not exceeding 15% of the total number of lectures delivered or practical work done in each subject may be condoned for special reasons as given below.
  - (a) A shortage up-to 5% of the total number of lectures delivered or practical work done in each subject may be condoned by the Head of the Department.
  - (b) A further shortage upto 10% may be condoned by the Dean of the Faculty on the specific recommendation of the concerned Head of Department.
- 3.2 No student will be allowed to appear in the end semester examination if he/she does not satisfy the overall average attendance requirements of Clause Nos. 3.1 and such candidate(s) shall be treated as having failed and will be further governed by clause no. 4.2 & 4.3.
- 3.3 The attendance shall be counted from the date of admission in the Faculty or start of academic session whichever is later.
  (Note: For the purpose of the attendance not more than three periods including lecture and tutorial in the same subject shall be counted on any one day).

## 4. **DURATION OF COURSES:**

- 4.1 Total duration of the B. Tech. Course shall be 4 years, each year comprising of two semesters. Each semester shall normally have teaching for the 90 working days or as prescribed by A.I.C.T.E. from time to time.
- 4.2 A candidate, who has failed twice in first year due to any reason, including due to his/her non-appearance or he/she being not permitted to appear in semester examinations, shall not be allowed to continue his/her studies further subject to clause 8.

Provided further that if a student wishes to continue third time in first year he/she may be allowed on the recommendation of a committee constituted by the Vice Chancellor. However, the maximum time allowed for completing the course shall remain the same as in clause 4.3.

- 4.3 The maximum time allowed for a candidate admitted in 1<sup>st</sup>/3<sup>rd</sup> semester (for lateral entry) for completing the B. Tech. course shall be 7 (seven)/ 6 (Six) years respectively, failing which he/she shall not be allowed to continue for his/her B. Tech. degree.
- 4.4 The minimum credit requirement for B. Tech. degree is 192. The lower and upper limit for course credit registered in a semester by a full time student are:

Lower limit - 16 credits & Upper limit - 28 credits

## 5. CHANGE OF BRANCH:

- 5.1 Change of branch may be allowed against the vacant seats at the following two stages, provided criteria in the following sub clauses are satisfied.
  - (i) In first year, after the last date of admission to the B. Tech. 1<sup>st</sup> semester, on the basis of merit of entrance examination on vacant seats subject to clause 5.2
  - (ii) In the second year, on the basis of merit at the B. Tech. first year examination for those who are passed without any carry over papers subject to clause 5.2

- 5.2 After change of branch, number of students in branch (s) shall neither increase over the approved intake nor will it decrease below 75% of approved intake.
- 5.3 Change of branch is not applicable to the candidates admitted in Second Year of B. Tech. courses (lateral entry) as per clause 2.
- 5.4 The change of branch if allowed will become effective from B. Tech. 3<sup>rd</sup> semester.
- 5.5 Further change of branch shall not be permitted.

## 6. CURRICULUM:

- 6.1 The 4 year curriculum has been divided into 8 semester and shall include lectures, tutorials, practicals, seminars and projects etc. in addition to industrial training and educational tour etc. as defined in the scheme and executive instructions issued by the Institute from time to time.
- 6.2 The curriculum shall also include such other curricular, co-curricular and extracurricular activities as may be prescribed by the Faculty from time to time.

## 7. CURRICULUM STRUCTURE OF THE PROGRAMME:

The Faculty shall follow credit-based semester system. Every programme will have a specific curriculum for all semesters (semester I to semester VIII) with a syllabi consisting of theory, practical, project work, etc. and shall be in accordance with the prescribed syllabus. The courses shall be covered through lectures, tutorials, laboratory classes, seminar, industrial and practical training, project, tours etc.

#### 7.1 Course Coverage

The course coverage for all the B. Tech. Programmes shall have the following categories:

- (i) Humanities and Social Sciences (HS)
- (ii) Management (M)
- (iii) Basic Applied Sciences (BAS)
- (iv) Basic Engineering Sciences (BES)
- (v) Departmental Core (DC)
- (vi) Departmental Electives (DE)
- (vii) Open Electives (OE)
- (viii) Project Work, Seminar and Industrial Training (PST)
- (ix) Mandatory Audit Courses (MAC)
- (x) Few audit courses as per demand and requirement of students may be offered.

Each course is assigned a certain number of credits as follows.

- (a) 1 credit per lecture hour per week
- (b) 1 credit per tutorial hour per week
- (c) 1 credit per 2 hours laboratory/practice/project per week.
- (d) 2 credits per 3 hours laboratory/practice/project per week.

#### 7.2 Grading System and Assessment Procedure:

An Absolute Grading System wherein the marks shall be converted into grades and the result of each semester will be declared with Semester Grade Point Average (SGPA) and Cumulative Grade Point

**Average** (CGPA). The CGPA will be calculated for every semester, except the first semester. The grading system to be adopted with Letter Grades and Grade Points Scale shall be as given below:

Letter		Grade	% (Marks Range)
Grade	Description	Point	
0	Outstanding	10	Greater than or equal to 90
$A^+$	Excellent	09	Less than 90 but greater than or equal to 80
А	Very Good	08	Less than 80 but greater than or equal to 70
$B^+$	Good	07	Less than 70 but greater than or equal to 60
В	Above Average	06	Less than 60 but greater than or equal to 50
С	Average	05	Less than 50 but greater than or equal to 45
Р	Poor	04	Less than 45 but greater than or equal to 40
F	Fail	00	Less than 40
U	Short Attendance	-	-
W	Withdrawal	-	-
Ι	Incomplete	-	-
UFM	Unfair Means	-	-
AP	Audit Pass	-	-
AF	Audit Fail	-	-
S	Satisfactory		
	Completion	-	-
Z	Course		
	Continuation	-	-

Rounding of the numeric value of grades obtained will be done till two places of decimal.

#### 7.3 Tests & Examinations

The theory and practical examinations shall consist of continuous assessment throughout the semester in all subjects. The End Semester Examination (ESE) will be conducted by University at the end of the semester. The assessment of courses will be done on absolute marks basis. However, for the purpose of reporting the performance of a candidate, letter grades, each carrying certain points, will be awarded as per the range of total marks obtained by the candidate as detailed below.

#### 7.4 Marks Distribution:

S. No.	Exam Category	Evaluation									
		Sessional									Grand
		СТ		ТА					Total	ESE	Total
		<b>CT 1</b>	<b>CT 2</b>	V 1	V 2	W	R	СР			
01	Theory Subject	10	10					10	30	70	100
02	Lab			05	05			10	20	30	50
03	Industrial Training				10	20	20	~	50		50
04	Seminar				10	20	20	~	50		50
05	Project 1			20	20	40	20		100		100
06	Project 2			25	25	50	50		150	100	250
07	MAC	10	10						20	30	50

# CT: Class Test; TA: Teacher's Assessment; ESE: End Semester Examination; V 1: Viva-Voce 1; V 2: Viva-Voce 2; W: work; R: Report; CP: Class Performance (Tutorial + Attendance)

#### Notes:

- **A.** The course coverage for Class Test-I, Class Test-II and End Semester Exam (ESE) will be respectively 40%, 80% and 100% of the syllabus.
- **B.** Students who remain absent in either of the class tests on genuine grounds such as medical reasons. Institute representation in academic/extra-curricular activities with prior permission of the concerned Head of Department may be permitted for a special test. Students, who remain absent in both the class tests with prior permission will be allowed one special test covering 80% of the syllabus.
- C. Class Performance will be based on assignments/tutorials, quizzes/viva-voce and attendance.

#### 7.5 General Proficiency :

A **qualitative Assessment Remark** for General Proficiency as detailed in the table below will be given in the transcript on the basis of cumulative percentages of marks scored by the student during each semester through various components. Distribution / Weightage for award of marks in each component is prescribed in the subsequent table.

S.N.	Assessment	Weightage of Marks	Marks
1.	Discipline/Behavior of Students Inside/Outside Institute campus by DSW	40%	20
2.	Games/Sports/Cultural/Literary/PFAC/Hobby Events by Chairman, CSA	40%	20
3.	Academic Activities/Special Lecture/ Industrial Visits by HOD	20%	10

S.N.	Marks Secured	Remark
1.	80-100%	Excellent
2.	60-79%	Very Good
3.	40-59%	Good
4.	20-39%	Satisfactory
5.	<20%	Poor

#### 8. CRITERIA FOR PASSING:

The performance of a student in a semester shall be evaluated through continuous class assessment and end semester examination. The continuous assessment shall be based on class tests, assignments/tutorials, quizzes/viva-voce and attendance. The marks for continuous assessment (sessional marks) shall be awarded at the end of the semester. The end semester examination shall comprise of written papers, practical and viva-voce, inspection of certified course work in classes and laboratories, project work, design reports or by means of any combination of these methods.

The distribution of marks for sessional, end semester theory papers, practical and other examinations, seminar, project and industrial training shall be as prescribed in the course structure. The practical, viva-voce, projects and reports shall be examined/evaluated through internal and external examiners as and when required.

The marks obtained in a subject shall consist of marks allotted in end semester theory paper and sessional work.

- 8.1 A Student who secures Grade O to P shall be considered as passed. If a student secures "F" grade, he /she has to reappear for the concerned subject examination. It is mandatory for a student to earn the required credits as mentioned in each semester.
  - (a) To pass in a Theory Subject, a student shall have to secure minimum 30% of the maximum marks prescribed for the End Semester Examination (ESE) and 40% of marks in the aggregate of End Semester Examination (ESE) and sessional marks assigned for that particular subject, i.e. Minimum Passing Grade shall be "P".
  - (b) For passing a Practical/Internship/Project/Viva-voce examination, a student shall have to secure a minimum of 50% of the prescribed maximum marks in the End Semester Examination of Practical/Internship/Project/Viva-voce and 50% of marks in the aggregate of Practical/Internship/Project/Viva-voce ESE and assigned sessional marks i.e. Minimum Passing Grade shall be "B".
  - (c) To pass in Seminar, a student shall require to secure a minimum of 50% of the maximum marks prescribed, i.e. Minimum Passing Grade shall be "B".
- 8.2 The student who do not satisfy the condition 8.1 or the student who remains absent shall be deemed to have failed in that subject and may appear for the University examination in the subsequent examinations the sessional marks awarded to the student/s at previous attempt in the concerned subject will be carried forward. However, if the student has secured less than 40% marks in the sessional, he/she will also be required to complete the sessional work of the concerned subject by way of assignments, quizzes and both class tests. The SGPA of the concerned semester will be calculated on the basis of the new grade secured by the student in the repeat examination of the subject (with new or old sessional marks as the case may be). Number of attempts taken to pass a subject/s shall be recorded in the transcript.
- 8.3 A student may, at his/her desire, opt to abandon his/her performance of a semester in following manner.
  - (a) A student may opt to abandon his/her performance only in University Examination of the Semester.
  - (b) A student may opt to abandon his/her total performance of the Semester which includes performance in University Examination and Sessional Marks.
  - (c) A student may opt of abandon his/her performance in University Examination of any or both semester of the same academic year only.

- (d) A student shall be allowed to abandon the performance maximum twice during the entire course of study.
- (e) Performance of a semester, once abandoned, cannot be claimed again.
- 8.4 The student, who opts to abandon the performance of a semester as per clause 8.3, shall abandon performance in all the courses of that semester, irrespective of fact whether the student has passed or failed in any subject of that semester.
- 8.5 A student, who opt to abandon the total performance of the semester including sessional marks, has to take readmission for the relevant semester. Readmission to the First semester in such cases shall not be considered as fresh admission i.e., the student will continue to have the same University Roll Number, which was allotted earlier.
- 8.6 The Student, who opted to abandon his/her performance only in the University examination of a semester and does not desire readmission, shall be permitted to re-appear for examinations of all the subjects of the semester in the subsequent examinations as an Ex- Student, However, the sessional marks obtained by the student in the abandoned semester shall be retained as per clause 8.2.
- 8.7 Such students who opted to abandon the performance at final year are eligible for the award of Class and Distinction at the B. Tech. degree level.
- 8.8 A student shall be declared to have completed the programme of B. Tech. degree, provided the student has undergone the stipulated course work as per the regulations and has earned atleast 192 Credits.
- 8.9 A student can avail one chance to improve his/her grade in one subject of just preceding semester in the next corresponding End Semester Examination, provided that he/she has secured P or higher grade in that subject. The grade secured in **"Improvement Attempt"** will be used for calculation of SGPA of the concerned semester and old grade secured in that particular subject will stand nullified.
- 8.10 For Audit Courses, Grade AP (Audit Pass) or AF (Audit Fail) shall be awarded and this will not be counted for the computation of SGPA/CGPA. Audit Fail students have to pass the course as per clause 8.2.

## 9. ELIGIBILITY FOR PROMOTION :

- 9.1 There shall not be any restriction for promotion from an odd semester to the next even semester.
- 9.2 For promotion from even semester to the next odd semester (i.e. of the next academic year) the student has to secured 24 credits in the immediately preceding two semesters including theory and practical credits.

#### **Minimum Credit Threshold for Promotion**

Check Point	Credit Threshold
First Year to Second Year Second Year to Third Year	24 Credits in First Year 24 Credits in Second year
Third Year to Fourth Year	24 Credits in Second year 24 Credits in Third year

9.3 The result of the semester shall be declared pass only on securing P or above grades in all subjects and minimum semester Grade Point Average (SGPA) is 5.0.

9.4 Student himself can decide to abandon the performance of any or both the semesters of same academic year as per clause 8.3 and reappear in abandoned semester examination as per clauses 8.4, 8.5, & 8.6.

#### 10. COMPUTATION OF SGPA AND CGPA :

(i) The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.

$$SGPA(S_i) = \sum_{i=1}^{n} (C_i \times G_i) / \sum_{i=1}^{n} C_i$$

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.

(i) The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$CGPA = \sum (C_i \times S_i) / \sum C_i$$

Where  $S_i$  is the SGPA of the ith semester and  $C_i$  is the total number of credits in that semester.

- (ii) The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.
- (iii) Formula for the conversion of CGPA into percent marks is CGPA x 10 = (% Marks)

## 11. AWARD OF DIVISION & RANK :

Division shall be awarded only after the eighth and final semester examination based on integrated performance of the candidate for all the eight semesters (six semesters for lateral entry) as per following details:

- 11.1 A candidate who qualifies for the award of the degree securing P or above grades in all subjects pertaining to all semesters in first attempt within eight consecutive semesters (four academic years)/ six consecutive semesters (three academic years) as applicable, and in addition secures a CGPA of 7.5 and above for the semesters I to VIII or IE to VIE shall be declared to have passed the examination in **FIRST DIVISION WITH HONOURS.**
- 11.2 A candidate who qualifies for the award of the degree by securing P or above grades in all subjects of all the semesters within maximum permissible period and secures CGPA not less than 6.5 shall be declared to have passed the examination in **FIRST DIVISION.**
- 11.3 All other candidates who qualify for the award of degree by securing P or above grades in all subjects of all semesters and secures CGPA not less than 5.0 shall be declared to have passed the examination in **SECOND DIVISION.**
- 11.3 For award of ranks in a branch, the first **Three** students will be awarded ranks, provided they have secured Grade P or above in all subjects pertaining to all semesters in first attempt within eight consecutive semesters (four academic years)/ six consecutive semesters (three academic years) as applicable.

## **12. SCRUTINY AND RE-EVALUATION:**

- 12.1 Scrutiny shall be permitted within two weeks after declaration of result and will only be allowed in theory papers on the request of a student after deposition of prescribed fee for each subject decided by the University.
- 12.2 Re-evaluation of theory/practical papers is not permitted.

## **13. UNFAIR MEANS:**

Cases of unfair means in the End Semester Examinations and Mid-Term Tests shall be dealt as per the rules of the University of Lucknow.

## 14. EX-STUDENTSHIP:

- 14.1 A candidate opting for ex-studentship shall be required to fulfill the conditions 8.3, 8.4, 8.5 & 8.6 and to appear in all the theory & practical subjects in the End Semester Examinations of both semesters of the same Academic Year. However, the marks of Sessional, Industrial Training, Seminar and General Proficiency shall remain the same as those secured by him/her in the previous Academic Year(s) as per clause 8.2.
- 14.2 A candidate opting for ex-studentship shall be required to apply to the Dean's office by paying only examination fee within 15 days from the start of new session.

## **15. RE-ADMISSION:**

A candidate may be allowed for re-admission provided he/she satisfies one of the following conditions:

- 15.1 A candidate is declared failed.
- 15.2 A candidate did not appear in a semester examination/or he/she was not granted permission to appear in the examination.
- 15.3 A candidate has been detained by the University and subsequently has been permitted to take readmission.
- 15.4 A candidate promoted with carry over subjects and he/she opted for readmission.

## 16. CANCELLATION OF ADMISSION:

The admission of a student at any stage of study shall stand cancelled if:

(i) He/she is not found qualified as per AICTE/State Government norms and guidelines or the eligibility criteria prescribed by the University.

or

(ii) If he/she fails to submit qualifying examination result/mark sheet after getting admission to B. Tech. First Semester/Third Semester (lateral entry) within a prescribed time.

or

(iii) He/she is found unable to complete the course within the stipulated time as prescribed in clause 4.2.

or

(iv) He/she is found involved in creating indiscipline in the University.

#### **17. INTERPRETATION CLAUSE :**

In case of any difficulty arising during the course of implementation of these ordinances or in case of any unforeseen circumstance, the interpretation/decision of the Vice-Chancellor shall be final.

- **18.** The Academic Council shall have the power to relax/change any provision provided in the ordinance in any specific matter/situation.
- **19.** Any legal issues arising out of the rules/provisions contained in the ordinances shall fall under the jurisdiction of District Lucknow.