

N.B.K.R. INSTITUTE OF SCIENCE & TECHNOLOGY (N.B.K.R.I.S.T)
(Autonomous)
(Affiliated to J.N.T. University Anantapur)

REGULATIONS FOR

FOUR YEAR BACHELOR OF TECHNOLOGY (B.Tech.) DEGREE PROGRAM

(With effect from the batches admitted in the academic year 2013 – 14)

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B.Tech. (Lateral Entry Scheme)

(For the batches admitted from the academic year 2014-15)

1. Minimum Qualifications for Admission :

A candidate seeking admission into first year B.Tech. Degree program should have passed the Intermediate Examination of the Board of Intermediate Education, Andhra Pradesh with Mathematics, Physics and Chemistry as optional subjects or any equivalent examination recognized by JNTUA, Anantapur).

A candidate seeking admission into second year of the four year B.Tech Degree program in engineering should have passed Diploma in Engineering conducted by the Board of Technical Education, Andhra Pradesh (or equivalent examination recognized by JNTUA, Anantapur).

Any other admission, authorized by the University and the Government of Andhra Pradesh, will be as per the eligibility criterion and procedure laid down by the said authorities.

2. Branches of Study :

2.1 The branches of study in B.Tech. Degree Program offered by the Institute are

- (a) Civil Engineering
- (b) Electrical & Electronics Engineering
- (c) Electronics & Communication Engineering
- (d) Mechanical Engineering
- (e) Computer Science & Engineering

2.2 A student is required to choose the course of study (branch) at the time of admission. No change of branch shall be permitted after the closure of admissions by the competent authority, nominated by the Government of Andhra Pradesh.

2.3 The duration of the program is of four academic years. The first year of study will be of annual pattern. Semester pattern shall be followed for the Second, Third and Fourth years of study with two semesters in each academic year.

3.0 Instruction Days:

First year of B.Tech. program consists of a minimum of 180 days, including the days allotted for tests.

Each semester shall consist of a minimum of 90 days, including the days allotted for tests.

4.0 Credits:

Credit defines the quantum of contents/syllabus prescribed for a course and the number of instruction hours per week. The norms for assigning credits to a course for duration of one semester shall be as follows :

- I One credit for every one hour lecture per week/semester.
- II Two credits for every three hours of drawing or practical per week/semester.

Similarly,

- I Two credits for every one hour lecture per week/year.
- II Four credits for every three hours of drawing or practical work per week/year.

5.0 Evaluation:

- 5.1 The performance of the students in first year /each semester shall be evaluated subject-wise. The distribution of marks between Sessional marks and end examination is as follows :

	Sessional Marks	End Examination Marks	Total
Theory courses	40	60	100
Design/Drawing	40	60	100
Practicals	40	60	100
Project work	80	120 (Viva voce)	200

5.2 Sessional Marks

- 5.2.1 For the award of sessional marks in I year in theory courses, each test for 40 marks shall be conducted. Each test shall be of two hours duration and three tests will be evenly distributed during the year. The final sessional marks shall be taken giving a weightage of 0.40 each for the better two tests and 0.20 for the other mid examination marks.
- 5.2.2 For award of sessional marks for theory courses in each semester two tests each for 40 marks shall be conducted. Each test shall be of two hours duration and the test shall be evenly distributed during the semester. The final sessional marks shall be taken giving a weightage of 0.80 for the better of the two tests and 0.20 for the other mid examination marks.
- 5.2.3 In case of practical subjects the sessional marks will be awarded based on day-to-day class work and one test at the end of I year / semester.

- 5.2.4** For the subject having design and / or drawing, such as Engineering Drawing, Machine Drawing and estimation etc., the distribution shall be 40 marks for internal evaluation and 60 Marks for end examination. The Internal evaluation for sessionals will be 20 marks for day- to-day work in the class that shall be evaluated by the concerned subject teacher based on the reports/submissions prepared in the class. And there shall be two midterm exams in a Semester for a duration of 2 hrs each, evenly distributed over the syllabi, for 40 marks each and the sessional marks shall be taken as enunciated in clause 5.2.2. However, in the I year class there shall be three midterm exams and the midterm examination component of the sessional marks shall be taken as enunciated in clause 5.2.1. The sum of day-to-day evaluation for 20 marks and the half of the midterm examinations marks will be the final sessional marks for the subject.
- 5.2.5** The Department concerned shall constitute a three-member committee, consisting of the Head of the Department concerned, one senior faculty member and the concerned guide to assess uniformly the performance of the students by way of seminars on the project work turned out by the students. The sessional marks shall be awarded by the concerned guide for 50% and the committee for the balance 50% based on the work turned out and submitted in the form of a project report.

6.0 End Examinations

6.1 For each of the theory, practical and design/drawing courses, there shall be an end Examination of three hours duration at the end of first year/ each semester, except where stated otherwise explicitly in the detailed scheme of instruction.

6.2 Recounting

Students shall be permitted to request only for recounting of the end theory examination answer scripts within a stipulated period after payment of the requisite fee. After recounting, records are updated with changes if any, and the student shall be issued a revised memorandum of marks. If there are no changes, the student shall be intimated the same.

In the recounting process, the valued answer script will be scrutinized jointly by the HOD concerned and a faculty nominated by the Director/Principal.

6.3 Instant examinations

Instant examinations may be conducted in the theory subjects of the final year second semester only for the benefit of those outgoing students who failed in or who are absent for only one theory subject of final year second semester and who do not have any other back logs. The instant exams will be conducted normally within one month of the announcement of the final semester results.

6.4 Conduct of Examinations

Question paper setting shall be undertaken by the Institute, choosing external examiners from the panels recommended by the respective Board of Studies. Evaluation of answer scripts shall also be undertaken by the Institute by choosing external/internal examiners from the panels recommended by the respective Board of Studies.

For each practical examination, the end examination will be conducted jointly by the laboratory teacher and another examiner nominated by the Director/Principal.

Project Viva-voce examination shall be conducted by two internal examiners and one external examiner. The appointment of internal and external examiners for the conduct Viva-voce examinations shall be made by the panels recommended by the respective Board of Studies. Panel of Examiners must consist of one internal and six external examiners.

7.0 Grading, Grade Point Average (GPA), Cumulative Grade Point Average (CGPA) and Grade sheet

After each subject is evaluated for 100 marks, the marks obtained in each subject will be converted to a corresponding letter grade as given below depending on the range in which the marks obtained by the student falls.

Conversion into grades and grade points assigned

Range in which the marks in the subject fall	Grade	Grade points assigned	Performance
≥ 95	A ⁺⁺	10	Out Standing
85 – 94	A ⁺	9.0	Excellent
75 – 84	A	8.0	Very Good
65 – 74	B ⁺	7.0	Good
55 - 64	B	6.0	Fair
45 – 54	C	5.0	Average
40 – 44	D	4.0	Satisfactory
< 40	F	0	Fail

7.1 Grade Point Average (GPA)

The grade point average for each semester/year is calculated as follows:

$$GPA = \frac{\sum_1^n (C_i)(GP_i)}{TC}$$

where n = number of subjects in the year/semester
for each subject, i

C_i = credits for the subject

GP_i = the grade point for the subject

TC = Total number of credits in the year / semester

7.2 Cumulative Grade Point Average (CGPA)

The CGPA is computed for every student at the end of each semester. The CGPA would give the cumulative performance of a student from the first year up to the end of the semester to which it refers and is calculated as follows:

$$CGPA = \frac{\sum_1^m (GPA_j)(TC_j)}{\sum_1^m TC_j}$$

where m = number of year/semesters under consideration
for each year / semester, j

TC_j = Total number of credits for a particular year/semester

GPA_j = the grade point average of that year/semester

Both GPA and CGPA will be rounded off to the second place after decimal and recorded as such.

While computing GPA/CGPA, the course in which the candidate is awarded zero grade points will also be included.

7.3 Grade Sheet

The grade sheet (memorandum) will be issued to each student indicating his performance in all the courses taken in that semester in the form of grades, also indicating the GPA of that semester and CGPA up to that semester.

7.4 Withholding of results

If the student has not paid the dues, if any, to the Institute or if any case of indiscipline is pending against him/her, the result of the student will be withheld and he/she will not be allowed into the next semester and his/her degree will be withheld in such cases.

8.0 Attendance Requirements

8.1 A student shall be eligible to appear for end Examinations if he acquires a minimum of 75% of attendance in aggregate of all subjects in a semester / I year

8.2 However, a student has to put in a minimum of 50% attendance in each course/subject, in addition to the condition laid down in clause 8.1.

8.3 Condonation of shortage of attendance may be recommended provided a student puts in at least 65% attendance in all the subjects put together as calculated in clause 8.1 above, along with a minimum of 50% attendance in each course as stated in clause 8.2. For condonation of shortage of attendance, the student shall pay the prescribed fee and submit an application in writing clearly stating the reason for shortage of attendance along with necessary documentary evidence. The final decision for condonation of attendance shall be taken by the college academic committee considering the merits of the case.

8.4 Shortage of attendance below 65% in aggregate shall in NO case be condoned.

8.5 Students whose shortage of attendance is not condoned in any semester/ I year are not eligible to take their end examination of that class and their registration for end examinations shall stand cancelled.

8.6 A student, who could not satisfy these requirements of attendance, as given in clauses 8.1 through 8.5 in first year or in any semester, shall have to repeat the first year or the semester as the case may be.

8.7 A student shall not be permitted to study first year or any semester for more than three times during the course of his / her study.

Further, a student is required to complete the course of study of B.Tech. program, satisfying all the attendance requirements in all the four years of the program within a period of eight academic years from the year of admission, failing which he/she shall forfeit his/her admission.

8.8 A student, who has satisfied the minimum attendance requirements in the first year or in any semester may repeat the first year or that semester with the permission of the Principal/Director and cancelling the previous record of attendance and sessional marks of the first year or that semester. [However, the facility may be availed of by the student not more than twice during the entire course of his/her studies and the entire course of study shall be within eight academic years, as stipulated in clause 8.7].

9.0 Minimum Academic Requirements

9.1 A candidate shall be declared to have passed in each theory, design/drawing, practical and project work, if he / she secures not less than 35% marks in the end examination and the sum total marks of 40% in the end examination plus the sessional marks secured by the student in that theory/design/drawing/practical.

9.2 A student eligible for the end examination in a subject, but absent at it or has failed in the end Examination may appear for that subject at the next examination as and when it is held.

10.0 Conditions for Promotion

10.1 A student shall be eligible for promotion to the I semester of II year B.Tech. if he/she satisfies the minimum attendance requirements for I B.Tech. as stipulated in clause 8.

10.2 A student shall be eligible for promotion to the next semester if he/she satisfies the minimum attendance requirement in the immediately preceding semester as given in clause 8.

11.0 Award of B.Tech. Degree

The degree of B.Tech. shall be conferred on a candidate, who has satisfied the following :

- (i) The candidate must have after admission to the regular B.Tech. programme of the Institute, pursued a course of study for not less than four academic years.
- (ii) The candidate must have satisfied the minimum academic requirements as in clause 9 in all the courses prescribed for the four-year programme.

12.0 Award of Class

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of B.Tech. Degree he shall be placed in one of the following four classes :

Class Awarded	CGPA
First Class with Distinction	≥ 7.5
First Class	≥ 6.5 and < 7.5
Second Class	≥ 5.5 and < 6.5
Pass Class	< 5.5

13.0 Award of Rank

13.1 Ranks shall be awarded in each branch of specialization for the top three students.

13.2 Only such candidate who completes the B.Tech. program within four academic years from the year of their admission are eligible for the award of rank.

13.3 For the purpose of awarding rank in each branch, total marks, i.e. end examination and sessional marks put together of all the semesters of II, III and IV B.Tech. secured in the first attempt only shall be taken into account. Candidates who have failed in any course in I year/semester are not eligible for the award of Rank.

14.0 Transitory Regulations

14.1 Candidates who studied the four year B.Tech. Degree course under Old Regulations but who could not satisfy the minimum attendance requirements in any year may join the first year/appropriate semester in the New Regulations applicable for the batch for the remaining part of the course and be governed by the Regulations of that batch from then on. Any candidate, admitted under Old Regulations, who wished to join in any particular year in the New Regulations under any other circumstances shall also be governed by the New Regulations from that year onwards.

14.2 Candidates who satisfy the minimum attendance requirements in any year under Old Regulations but who are yet to pass some subjects of that year even after three chances shall appear for the equivalent subjects specified by the Board of Studies of the concerned branch.

15.0 Amendment of Regulations

N.B.K.R. Institute of Science & Technology reserves the right to amend these regulations at any time in future without any notice. Further, the interpretation of any of the clauses of these regulations entirely rests with the College Academic Committee.