

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
COLLEGE OF ENGINEERING (Autonomous), ANANTAPURAMU**

Academic Regulations 2013 (R13) for B. Tech (Regular)

(Applicable for the students admitted during the Academic Year 2013-2014 and onwards)

1. Award of B.Tech. Degree

A student will be declared eligible for the award of the B.Tech. degree if he/she fulfils the following academic regulations:

- i. Pursue a course of study for not less than four academic years and in not more than eight academic years.
 - ii. Register for 180 credits and secure all 180 credits
2. Students who fail to fulfill all the academic requirements for the award of the degree within eight academic years from the year of their admission, shall forfeit their seat in B.Tech course and their admission is cancelled.

3. Courses of study

The following courses of study are offered at present for B. Tech. degree

S.No.	Branch
1.	Civil Engineering
2.	Electrical and Electronics Engineering.
3.	Mechanical Engineering.
4.	Electronics and Communication Engineering
5.	Computer Science and Engineering.
6.	Chemical Engineering

and any other course as approved by the authorities of the University from time to time.

4. Course pattern & Credits:

- i. The entire course of study is of four academic years on semester pattern.
- ii. Credits

	Semester	
	Periods / Week	Credits
Theory	04	03
Practical	03	02
Project Part A	03	02
Project Part B	15	10

5. Distribution and Weightage of Marks

- i. The performance of a student in each semester shall be evaluated subject-wise with a maximum of 100 marks for theory and 75 marks for practical subject. In addition seminar, comprehensive viva-voce and project work shall be evaluated for 25, 50 and 200 marks respectively.
- ii. For theory subjects the distribution shall be 30 marks for Internal Evaluation and 70 marks for the External Evaluation.
- iii. There shall be five units in each of the theory subjects.
- iv. For practical subjects there shall be a continuous evaluation during the semester for 25 internal marks and 50 end examination marks

5.1 External Evaluation

- A) The student shall answer six questions with following pattern in the End-Examination.
- a) All Questions have to be answered compulsorily.
 - b) Question I shall contain 10 short Answer questions “a” to “j” each of 2 marks, with two questions from each unit. (Total 20 marks)
 - c) For the remaining five questions, two questions from each of the five units with Either/Or type have to be set for 10 marks each and they may contain two or more sub questions (Total 50 marks)

- B) Further, whenever any theory subject with two parts is offered (combined subject), for ex: Electrical & Mechanical Technology, then there shall be only two parts Part A, Part B in the question paper.
 Part – A: shall contain three questions, EITHER/OR type shall be followed, for 35 marks and for each question 12, 12, & 11 marks shall be allocated.
 Part – B: shall also contain three questions, EITHER/OR type shall be followed, for 35 marks and for each question 12, 12, & 11 marks shall be allocated.
- C) For the subjects having design and / or drawing, such as Engineering Drawing, Machine Drawing and Estimation, there shall be five questions for a total of 70 marks. Two questions from each of the five units with Either / Or type have to be set. Each question carries 14 marks and they may contain two or more sub questions.
- D) For practical subjects the end examination shall be conducted for 50 marks by the concerned laboratory teacher and another examiner from the same department.

5.2 Internal Evaluation

- A) For theory subjects, there shall be two midterm examinations during the semester. Each midterm examination shall consist of an objective paper for 10 marks and a subjective paper for 20 marks with duration of 20 and 90 minutes respectively.

Objective test paper is set for 20 multiple choice questions for 1 mark for each, then condensed for 10 marks. *Subjective test paper shall contain three questions, EITHER/OR type shall be evaluated for 10 marks for each, then condensed for 20 marks. First midterm examination shall be conducted for I, II & half of III unit syllabus and second midterm examination shall be conducted for the remaining syllabus. Both the midterm exams are compulsory. Final Internal marks for a total of 30 marks shall be arrived at by considering the marks secured by the student in both the mid examinations with 80% weightage to the better mid exam and 20% to the other, any fraction rounded off to the next higher mark.

*Subjective test changed to EITHER/OR type w.e.f. October, 2016

Note: The midterm examination shall be conducted first by distribution of the Objective test paper simultaneously marking the attendance, after 20 minutes the answered objective paper is collected back. The student is not allowed to leave the examination hall. Then the subjective question paper and the answer booklet shall be distributed. After 90 minutes the answered booklets are collected back.

- B) For practical subjects day-to-day work in the laboratory shall be evaluated for 25 marks by the concerned laboratory teacher based on the report of experiments/jobs.
- C) For the subject having design and / or drawing, such as Engineering Drawing, Machine Drawing and Estimation, the distribution shall be 30 marks for internal evaluation. The Internal evaluation will be for 15 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 15 marks. The final mid exam marks shall be arrived at by considering the marks secured by the student in both the mid examinations with 80% weightage to the better mid exam and 20% to the other, any fraction rounded off to the next higher mark. The sum of day to day evaluation and the final mid exam marks will be the final internal marks for the subject.
- v. There shall be an audit pass course in Human Values & Professional Ethics and Advanced Communication Skills lab with no credits. There shall be no external examination. However, attendance in the audit course shall be considered while calculating aggregate attendance.
- vi. There shall be one Massively Open Online Course (MOOCs) in IV year I semester. Student shall register for MOOCs with specified MOOCs provider/s and need to submit proof of the same. The evaluation of MOOCs subject is same as that of theory subjects. Internal exam shall be conducted by mentor allotted and end semester exam shall be conducted along with other theory subjects.
- vii. There shall be a Seminar presentation in IV year II Semester. For the Seminar, the student shall collect the information on a specialized topic and prepare a technical report, showing his understanding over the topic, and submit to the department before presentation. The report and the presentation shall be evaluated by the Departmental committee consisting of Head of the Department, Seminar Supervisor

and a senior faculty member. The Seminar shall be evaluated for 25 marks. There shall be no external examination for Seminar.

There shall be a Comprehensive viva-voce in IV year II Semester. The Comprehensive viva-voce will be conducted by a committee consisting of Head of the Department and two senior faculty members of the department. The Comprehensive viva-voce is aimed to assess the student's understanding of the various subjects he/she studies during the B.Tech. course. The Comprehensive viva-voce is evaluated for 50 marks by the committee.

A student shall acquire 3 credits assigned to the seminar & comprehensive viva-voce only when he/she secures 30 marks on aggregate out of 75 marks allocated.

- viii. Out of a total of 200 marks for the project work, 60 marks shall be for Internal Evaluation and 140 marks for the End Semester Examination (viva-voce). The viva-voce shall be conducted by a committee consisting of Head of the Department, Project Supervisor and an External Examiner nominated by the Principal. The project work shall start in IV year I semester (Part A) and shall continue in the semester break. The evaluation of project work shall be conducted at the end of the IV year II semester (Part B). The Internal Evaluation shall be made by the departmental committee, on the basis of two seminars given by each student on the topic of his project. **Out of the 60 marks for internal evaluation there shall be 30 marks for Part A and 30 marks for Part B of project respectively.**
- ix. The laboratory records and internal test papers shall be preserved for minimum of 2 years in the respective departments and shall be produced to the Internal/External Committees as and when the same are asked for.

6. Attendance Requirements

- i. A student shall be eligible to appear for end examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the subjects in a semester.
- ii. **Shortage of attendance below 65% in aggregate shall in NO CASE be condoned.**
- iii. Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted by the College Academic Committee.
- iv. Condonation of shortage of attendance shall be granted only on genuine and valid reasons on representation by the candidate with supporting evidence.
- v. Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examination of that class and their registration for that semester shall stand cancelled.
- vi. A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester, as applicable. He/She may seek readmission for that semester when offered next.
- vii. A stipulated fee shall be payable towards condonation of shortage of attendance to the college.

7. Minimum Academic Requirements

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no.6

- i. A student shall be deemed to have satisfied the minimum academic requirements and earned the credits allotted to each theory, practical, design, drawing subject or project if he/she secures not less than 35% of marks in the end examination and a minimum of 40% of marks in the sum total of the internal and external evaluation taken together. In the Seminar & Comprehensive viva-voce he/she should secure a minimum of 40% marks.
- ii. A student shall be promoted from II to III year only if he/she fulfils the academic requirement of securing **26 credits (40%)** of the subjects that have been studied up to II year I semester from
 - a. Two regular and one supplementary examinations of I year I semester
 - b. One regular and one supplementary examination of I year II semester.
 - c. One regular examination of II year I semesterirrespective of whether the candidate takes the end examination or not as per the normal course of study.
- iii. A student shall be promoted from third year to fourth year only if he fulfils the academic requirements of securing **44 credits (40%)** of the subjects that have been studied upto III year I semester from the following examinations,
 - a. Three regular and two supplementary examinations of I year I semester.
 - b. Two regular and two supplementary examination of I year II semester.

- c. Two regular and one supplementary examinations of II year I semester.
- d. One regular and one supplementary examinations of II year II semester.
- e. One regular examination of III year I semester.

irrespective of whether the candidate takes the end examination or not as per the normal course of study.

And in case of getting detained for want of credits by sections ii and iii above, the student may make up the credits through supplementary exams of the above exams before the date of class work commencement of Third or Fourth year I semester respectively.

- iv. A student shall register and put up minimum attendance in all 180 credits and earn all the 180 credits. Marks obtained in all 180 credits shall be considered for the calculation of overall percentage of marks obtained.
- v. Students who fail to earn 180 credits as indicated in the course structure within eight academic years from the year of their admission shall forfeit their seat in B.Tech course and their admission shall stand cancelled.
- vi. A student who is eligible to appear 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 supplementary examination offered.

9. Transitory Regulations

Candidates who have been detained for want of attendance or not fulfilled academic requirements or who have failed after having undergone the course in earlier regulations or have discontinued and wish to continue the course are eligible for admission into the unfinished semester from the date of commencement of class work with the same or equivalent subjects as and when subjects are offered, subject to Section 2 and they will be in the academic regulations into which they are presently readmitted.

10. With-holding of results

If the candidate has any dues not paid to the college or if any case of indiscipline or malpractice is pending against him, the result of the candidate shall be withheld and he will not be allowed / promoted into the next higher semester. The issue of awarding degree is liable to be withheld in such cases.

11. 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/she shall be placed in one of the following four classes:

Class Awarded	% of marks to be secured	From the aggregate marks secured for 180 credits
First Class with Distinction	70% and above	
First Class	Below 70% but not less than 60%	
Second Class	Below 60% but not less than 50%	
Pass Class	Below 50% but not less than 40%	

(The marks in internal evaluation and end examination shall be shown separately in the marks memorandum)

Further, the University, vide its University order RP/No. 164/2013 dt: 02.05.2013, has permitted for rounding of percentages to the extent of 0.5% to effect change of class from pass class to Second class, Second class to First class, First class to First class with distinction for all the courses being offered or to be offered by the University without adding any marks to the original marks secured by the students.

12. Minimum Instruction Days

The minimum instruction days including exams for each semester shall be 90 days.

13. There shall be no branch transfers after the completion of admission process.

14. There shall be no place transfer within the constituent colleges of Jawaharlal Nehru Technological University Anantapur during the entire course of the program.

15. General:

- i. The academic regulations should be read as a whole for purpose of any interpretation.
- ii. Malpractice rules - nature and punishments is appended
- iii. Where the words “he”, “him”, “his”, occur in the regulations, they include “she”, “her”, “hers”.
- iv. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal is final.

- v. **The College may change or amend the academic regulations or syllabi at any time and the changes or amendments shall be made applicable to all the students on roles with effect from the dates notified by the College.**

*_*_*