

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA – 533 003 Academic Regulations 2007 for B.Tech. (Regular)

(Effective for the students admitted in to I year from the Academic Year 2007-2008 and onwards)

1. Award of B.Tech. Degree

A student will be declared eligible for the award of the B.Tech. Degree if he fulfils the following academic regulations.

- i. Pursued a course of study for not less than four academic years and not more than eight academic years.
- ii. Registered for **224** credits and secured **216** credits with compulsory subjects as listed in Table -1.

Table 1: Compulsory Subjects

S.No.	Subject Particulars
1	All the first year subjects
2	All the Practical Subjects
3	Industry oriented mini project
4	Comprehensive Viva - Voce
5	Seminar
6	Project work

2. Students, who fail to fulfil all the academic requirements for the award of the the degree with in eight academic years from the year of their admission, shall forfeit their seat in B.Tech course.

3. Course of study

The following courses of study are offered at present for specialization for the B.Tech. Course.

Branch Code	Branch
I.	Aeronautical Engineering
II.	Bio- Medical Engineering
III.	Biotechnology
IV.	Chemical Engineering
V.	Civil Engineering
VI.	Computer Science and Engineering
VII.	Electrical and Electronic Engineering
VIII.	Electronics and Communication Engineering
IX.	Electronics and Computer Engineering
X.	Electronics and Control Engineering
XI.	Electronics and Instrumentation Engineering
XII.	Information Technology
XIII.	Instrumentation and Control Engineering
XIV.	Mechanical Engineering

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

4. Credits

	l Year		Semester	
	Periods/ week	Credits	Periods / week	Credits
	03	06	04	04
Theory	02	04		
	04	08	_	-
Practical	03	04	03	02
	06	08	06	04
Drawing	03	04	03	02
	06	08	06	04
Mini Project	-	-	-	02
Comprehensive	_	_	_	02
Viva Voce	_	_	_	02
Seminar	-	-	-	02
Project	-	-	-	12

5. Distribution and Weightage of Marks

- i. The performance of a student in each semester / I year shall be evaluated subject wise with a maximum of 100 marks for theory and 75 marks for practical subject. In addition, Industry Oriented mini project, seminar and project work shall be evaluated for 50, 50 and 200 marks respectively.
- ii. For theory subjects the distribution shall be 20 marks for Internal Evaluation and 80 marks for the End Examinations.
- iii. For theory subjects, during the semester there shall be 4 tests, which include, 2 objective type tests each for duration of 20 minutes each and two subjective type tests each for duration of 90 minutes each. One objective type test and one subjective test to be conducted in 1-4 units and one objective type test and one subjective type test to be conducted in 5-8 units of each semester. The best 3 tests will be considered for awarding 20 sessional marks. For the I year class which shall be on yearly basis, there shall be 6 tests which include, 3 objective type tests and 3 subjective type tests with the same duration and weightage for each test as mentioned above. However, the performance in the best 4 tests will be considered for awarding 20 sessional marks. The distribution of syllabus for the conduct of objective and subjective type tests in the first year shall be as follows:

1-2 Units one Objective type and one Subjective type test.

3-5 Units one Objective type and one Subjective type test.

6-8 Units one Objective type and one Subjective type test.

Each Objective test question paper shall contain 20 objective type questions for 20 marks. Each subjective type test question paper shall contain 5 questions out of which any 3 questions need to be answered. The subjective type question paper should also be for 20 marks. Though the test pattern is different, all the tests (Objective and Subjective type tests) have equal weightage.

- iv. For practical subjects there shall be continuous evaluation during the semester for 25 sessional marks and 50 end examination marks. Of the 25 marks for internal, 15 marks shall be awarded for day to day work and 10 marks to be awarded by conducting an internal laboratory test. The end examination shall be conducted by the teacher concerned and external examiner.
- v. For the subject having design and / or drawing, (such as Engineering Graphics, Engineering Drawing, Machine Drawing) and estimation, the distribution shall be 20 marks for internal evaluation (10 marks for day to day work and 10 marks for internal tests) and 80 marks for end examination. There shall be two internal tests in a Semester and the better of the two shall be considered for the award of marks for internal tests. However in the I Year class, there shall be three tests and the best two will be taken into consideration.

- vi. There shall be an industry oriented mini Project, in collaboration with an industry of their specialization, to be taken up during the vacation after III year II Semester examination. However, the mini project and its report shall be evaluated with the project work in IV year II Semester. The industry oriented mini project shall be submitted in report form and should be presented before the committee, which shall evaluate for 50 marks. The committee consists of an external examiner, head of the department, the supervisor of mini project and senior faculty member of the department. There shall be no internal marks for industry oriented mini project.
- 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, which shall be evaluated by the Departmental committee consisting of Head of the department, seminar supervisor and a senior faculty member. The seminar report shall be evaluated for 50 marks. There shall be no external examination for seminar.
- Viii.There shall be a Comprehensive Viva Voce in IV Year II Semester. The Comprehensive Viva Voce will be conducted by a Committee consisting of (i) Head of the Department (ii) two senior Faculty members of the Department. The Comprehensive Viva Voce is aimed to assess the students understanding in various subjects he / she studied during the B.Tech. course of study. The Comprehensive Viva Voce is valued for 100 marks by the Committee. There are no internal marks for the Comprehensive Viva Voce.
- ix. Out of a total of 200 marks for the project work, 40 marks shall be for Internal Evaluation and 160 marks for the End Semester Examination. The End Semester Examination (Viva Voce) shall be conducted by the same committee appointed for industry oriented mini project. In addition the project supervisor shall also be included in the committee. The topics for industry Oriented mini project, seminar and project work shall be different from each other. The evaluation of project work shall be conducted at the end of the IV year. The Internal Evaluation shall be on the basis of two seminars given by each student on the topic of his project.
- x. Laboratory marks and the sessional marks awarded by the College are not final. They are subject to scrutiny and scaling by the University wherever felt desirable. The sessional and laboratory marks awarded by the College will be referred to a Committee. The Committee will arrive at scaling factor and the marks will be scaled as per the scaling factor. The recommendations of the Committee are final and binding. The laboratory records and internal test papers shall be preserved in the respective departments as per the University norms and shall be produced to the Committees of the University as and when they ask for.

6. Attendance Requirements:

- i. A student shall be eligible to appear for University examinations if acquires a minimum of 75% of attendance in aggregate of all the subjects.
- ii.Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester or I Year may be granted by the College Academic Committee.
- iii. A Student will not be promoted to the next semester unless he satisfies the attendance requirement of the present semester / I year, as applicable. They may seek re-admission for that semester / I year when offered next.
- iv. Shortage of Attendance below 65% in aggregate shall in NO case be condoned.
- v. Students whose shortage of attendance is not condoned in any semester / I Year are not eligible to take their and examination of that class and their registration shall stand cancelled.
- vi. A stipulated fee shall be payable towards condonation of shortage of attendance.

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 or practical design or drawing subject or project if he 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 evaluation and end examination taken together.
- ii. A student shall be promoted from II to III year only if he fulfils the academic requirement of 42 credits from one regular and one supplementary examinations of I year, and one regular examinations of II Year I Semester irrespective of whether the candidate takes the examination or not.
- iii. A student shall be promoted from third year to fourth year only if he fulfils the academic requirements of total 70 credits from the following examinations, whether the candidate takes the examinations or not.
 - a. Two regular and two supplementary examinations of I Year.
 - b. Two regular and one supplementary examinations of II year I semester.
 - c. One regular and one supplementary examinations of II year II semester.
 - d. One regular examination of III year I Semester.
- iv. A student shall register and put up minimum attendance in all 224 credits and earn the 216 credits. Marks obtained in the best 216 credits shall be considered for the calculation of percentage of marks.
- v. Students who fail to earn 216 credits as indicated in the course structure including compulsory subjects as indicated in Table 1 within eight academic years from the year of their admission shall forfeit their seat in B.Tech. course and their admission shall stand cancelled.

8. Course pattern:

- i. The entire course of study is of four academic years. The first year shall be on yearly pattern and the second, third and fourth years on semester pattern.
- ii. A student eligible to appear for the end examination in subject, but absent at it or has failed in the end examinations may appear for that subject at the supplementary examinations.
- iii. When a student is detained due to lack of credits / shortage of attendance, he may be re-admitted when the semester / year is offered after fulfillment of academic regulations. Whereas the academic regulations hold good with the regulations he/she first admitted.

9. Award of Class:

After a student has satisfied the requirement 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	% of marks to be secured	
First Class with Distinction	70% and above	From the aggregate marks secured from the best 216
First Class	Below 70% but not less than 60%	
Second Class	Below 60% but not less than 50%	Credits.
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)

10. Minimum Instruction Days:

The minimum instruction days for each semester / I Year shall be 95/180 clear instruction days.

- **11**. There shall be no branch transfer after the completion of admission process.
- **12**. There shall be no place transfer within the Constituent Colleges and Units of Jawaharlal Nehru Technological University.

13. General:

- i. Where the words "he" "him" "his", occur in the regulations, they include "she","her","hers".
- ii. The academic regulation should be read as a whole for the purpose of any interpretation.
- iii. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice Chancellor is final.
- iv. The University may change or amend the academic regulations or syllabi at any time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the University.



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA – 533 003 Academic Regulations 2007 for B.Tech. (Lateral Entry Scheme)

(Effective for the students getting admitted into II year from the Academic Year 2008-2009 and onwards)

 The Students have to acquire 160 credits from II to IV year of B.Tech. Program (Regular)

for the award of the degree.

Registered for 168 credits and secured 160 credits with compulsory subjects as listed in Table -1.

Table 1: Compulsory Subjects

S.No.	Subject Particulars		
1.	All Practical Subjects		
2.	Industry Oriented mini Project		
3.	Comprehensive Viva – Voce		
4.	Seminar		
5	Project Work		

- **2.** Students, who fail to fulfil the requirement for the award of the degree in 6 consecutive academic years from the year of admission, shall forfeit their seat.
- 3. The same attendance regulations are to be adopted as that of B.Tech. (Regular)

4. Promotion Rule:

A student shall be promoted from third year to fourth only if he fulfils the academic requirements of 42 credits from the examinations.

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

5. Award of Class:

After a student has satisfied the requirement 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:

First Class with Distinction	70 % and above	From the aggregate mark secured from the best 16	
First Class	Below 70% but not less than 60 %	Credits.	
Second Class	Below 60% but not less than 50%	(i.e II year to IV year)	
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)

6.All other regulations as applicable for B.Tech. Four- year degree course (Regular) will hold good for B.Tech. (Lateral Entry Scheme)