

**Regulations for Four-Year Bachelor of Technology (B.Tech)
Degree Course
(With effect from the batch admitted in 2010-11)**

1. **MINIMUM QUALIFICATIONS FOR ADMISSION:** A candidate seeking admission in to first year B.Tech. Degree course should have passed the Intermediate Examination of the Board of Intermediate Education of Andhra Pradesh with Mathematics and Physical Sciences (Physics and Chemistry) as optional subjects or any other equivalent examination thereto recognised by J N T University, Anantapur. For lateral entry admissions into II B.Tech Degree course, candidate should have passed diploma.
2. **AWARD OF B.TECH DEGREE:** After having admitted in to the course the degree of B.Tech shall be conferred on a student who has satisfied the following conditions.
 - 2.1 The student joining with Intermediate qualification must have, after admission into the regular B.Tech programme of the college, pursued a regular course of study for not less than four academic years in this college.
 - 2.2 The student joining under lateral entry scheme with diploma qualification must have, after admission into II B.Tech, pursued a regular course of study for not less than three academic years in this college.
 - 2.3 The student must have satisfied the minimum academic requirements in appropriate branch of engineering in each year/semester of the course, herein after prescribed.
3. **COURSES OF STUDY:** The courses of study prescribed for B.Tech. Degree are
 1. Computer Science and Engineering (*CSE*).
 2. Civil Engineering (*CE*).
 3. Electronics and communication Engineering (*ECE*).
 4. Mechanical engineering (*ME*).
 5. Electrical and Electronics Engineering (*EEE*).
 6. Computer Science and Information Technology (*CSIT*).
 7. Any other course offered by the college
- 3.1 The first year of study will be of annual pattern. The II, III and IV years of study will be of semester pattern with two semesters in each year. A student is required to choose a branch of study at the time of admission. Students under lateral entry will be admitted straightaway into II B.Tech. No change of branch shall be allowed after the admissions are closed.
4. **ATTENDANCE REQUIREMENT:** Regular course of study means a minimum aggregate attendance of 75% in all subjects put together in the year/semester.

Condonation of shortage of attendance in genuine cases on health grounds may be recommended by the Principal, if a student puts in an aggregate attendance of at least 65%. However the student has to make an application and pay the prescribed fee. **This regulation will come into immediate effect for all the students on rolls.**

A student who has not satisfied these requirements of attendance in any year/semester shall have to repeat that year/semester. The attendance under this clause does not include attendance at any examination/test.

A student, who has satisfied the minimum attendance requirements in any year/semester, may repeat that year/semester, after obtaining written permission from the principal and cancelling the previous record of attendance and sessional work of the year/semester. However, this facility may be availed by any student not more than twice (only once by the lateral entry students) during the entire course of study.

A student is required to complete the course of study satisfying the attendance requirements in all the four years of the course within a period of eight academic years from the year of admission, failing which

he/she shall be declared ineligible to pursue B.Tech degree course . Lateral entry students should complete the course of study within six academic years from the year of admission.

Completing the course of study shall mean not only satisfying the attendance requirements but also passing of all the subjects within the respective stipulated period.

5. **CREDIT SYSTEM :** While preparing the scheme of instructions and examinations, each subject is allotted certain number of contact periods in a week which will be determined depending on the complexity and the quantity of the contents in the syllabus prescribed for the subject

The credits are assigned for each subject based on the number of contact periods per week. There may be some subjects like Mini-Project, Comprehensive Viva, Project Work and Practice School for which the formal contact periods may not be specified and for such subjects credits are straight away assigned based on the complexity and volume of work expected to be carried out.

The credits for each subject are determined as per the norms specified in the following table:

Subject	No. of contact periods per week as per the scheme	Credits for I B.Tech (Year wise)	Credits for II,III & IV B.Tech (Semester wise)
Theory	n	2n	n
Practical	2	2	1
Practical	3 or 4	4	2
Open Electives / Soft skills courses	3	-	2
Mini-Project/ Comprehensive viva	-	-	3
Final year Project/ Practice School	-	-	10

6. EVALUATION :

6.1 Assessment

The performance of the students in each year / semester shall be evaluated subject-wise for 100 marks out of which 70 marks will be for the end examination and 30 marks will be for the internal continuous assessment. However in the case of open Electives and Soft skills subjects all the 100 marks will be for internal evaluation only and there will be no end examination.

6.2 End examinations

- (i) There shall be a comprehensive end examination for Three hours duration for each Theory, Design and /or Drawing subject for 70 marks. Question paper setting shall be done by the external examiners.
- (ii) For each practical subject the end examination with duration as specified in the scheme shall be conducted for 70 marks by one internal and one external examiner. However if external examiner is not available Principal/Chief-Superintendent may nominate a faculty member from same Institute as an external examiner.
- (iii) The viva-voce examination in the Mini Project / Comprehensive Viva / Project Work / Practice School shall be conducted by one external and two Internal examiners for 70 marks.
- (iv) There will be no end examination for Open Electives and Soft Skill subjects.

6.3 Internal Continuous Assessment

- i) In the case of theory subjects, out of 30 marks 20 marks are awarded based on the performance of the students in two sessional examinations conducted one in the middle of the year / semester

and the other towards the end of the year/ semester giving a weightage of 0.75 for the better score and 0.25 for the other score. The other 10 marks are awarded based on the average of marks scored in two quiz/assignment tests.

- ii) In the case of practical examinations out of 30 marks 20 marks are awarded based on the performance in the day to day laboratory work and 10 marks for viva-voce and a practical examination conducted at the end of the semester / year.
- iii) In the case of Project Work/ Practice School/Mini Project /Comprehensive Viva, the entire 30 marks are awarded based on the continuous evaluation by the guide / supervisor.
- iv) In the case of Open Electives and Soft Skill subjects two sessional examinations shall be conducted one in the middle of the semester and the other towards the end of the semester for 70 marks and the marks scored by the student in these exams with a weightage of 0.75 for the better score and 0.25 for the other score will be awarded as internal marks for 70.. The remaining 30 marks are based on the average of marks scored in two quiz/assignment tests.
- v) No make up test for the sessional exams or Assignments or quiz tests will be conducted in any subject or practical. A student, who is absent for any test , shall be deemed to have scored zero in that test.

6.4 Distribution of weightages for examination and evaluation :

S. No.	Nature of subject	Marks	Type of examination and mode of assessment		Scheme of examination
1	Theory	70	End examination (External evaluation)		This end examination in theory subjects will be for a maximum of 70 marks.
		30	20	Mid Examinations (Internal evaluation)	These 20 marks are awarded to the students based on the performance in two internal examination with a weightage of 0.75 for the better score and 0.25 for the other score
			10	Assignments (Internal evaluation)	Average of 2 quiz tests or Assignment tests each of 10 marks
2	Practical	70	End Lab examination (external evaluation)		This end examination in practical subjects will be for a maximum of 70 marks
		30	20	Internal evaluation	Day to day Performance in lab experiments / and Record
			10	Internal evaluation	Viva voce and internal practical examination
3	Mini Project / Comprehensive Viva / Final Year Project/ Practice School	100	70	External evaluation	Viva voce on Mini Project/Viva Voce on all the subjects/Project Report/Report on Practice School
			30	Internal evaluation	Continuous evaluation by guide/supervisor
4	Open electives and soft skill Subjects	100	70	Internal evaluation	These 70 marks are awarded to the students based on the performance in two internal examination with a weightage of 0.75 for the better score and 0.25 for the other score
			30	Internal evaluation	Average of 2 quiz tests or Assignment tests each of 30 marks

6.5 Eligibility for appearing for the end examinations :

- (i) All the students who satisfy the attendance requirements in that semester/year shall pay the prescribed examination fee and appear for the end examinations of that year/semester. However, they have to clear all the dues to the college before they collect their hall tickets.
- (ii) It is mandatory for all the eligible students to apply for the regular end examination failing which they have to pay all the preceding examinations fee with fine as prescribed by the college, if they wish to appear for next examination

6.6 **Grading :** 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.

Table – Conversion into Grades and Grade Points assigned

Range in which the marks in the subject fall	Grade	Grade points assigned	Performance
≥ 95	S	10	Out Standing
90 to 94	A1	9.5	Excellent
85 to 89	A2	9	
80 to 84	A3	8.5	Very Good
75 to 79	B1	8	
70 to 74	B2	7.5	Good
65 to 69	B3	7	
60 to 64	C1	6.5	Average
55 to 59	C2	6	
50 to 54	C3	5.5	Satisfactory
45 to 49	D	5	
40 to 44	E	4.5	
< 40	F or G*	0	F for fail
ABSENT	AAA	0	

- *Requirement for clearing any subject:* The students have to obtain a minimum of 35 % marks in the end examinations and also minimum 40% of marks in the sum of the internal evaluation and end examination taken together, otherwise they will be awarded fail grade-F in that subject.
- F is considered as a fail grade indicating that the student has to reappear for the end supplementary examination in that subject and obtain a non fail grade for clearing that subject.
- * In the case of open electives and soft skill subjects as there is no end exam and all the 100 marks are for internal assessment only, and since there is no stipulated minimum for internal assessment, only for these subjects an additional grade namely G is used with grade points of *zero* whenever the marks scored by the student is less than 40 %.
- To become eligible for the award of degree the student must obtain a minimum CGPA (explained in clause 7) of 4.0

Change in Internal continuous assessment for Scheme 2010: (w.e.f the academic year 2013-2014)

In scheme 2010, as a part of internal assessment in addition to internal exams, two quiz/assignments are being conducted for 10 marks each and average of two quiz/assignments is considered. Instead of two quiz/assignments the pattern of sessional question paper is modified to include both subjective and descriptive questions. The two sessional examinations shall be conducted for 30 marks each and the question paper for sessional exam shall consist of six questions. The first question which is compulsory carries 6 marks and the remaining 5 questions carry 8 marks each. The student has to answer question number 1 (6 marks) compulsorily and any three (3×8)

from the remaining five descriptive questions. Question 1 shall consist of Six (6 × 1) sub questions with either objective type, fill in the blanks, short answer questions etc. covering the entire syllabus prescribed for the respective examination. The sessional marks shall be finalized with a weightage of 0.75 for the better score and 0.25 for the other.

In the case of audit courses, the two sessional examinations shall be conducted for 50 marks each. The question paper for sessional exam shall consist of six questions. The student has to answer question number 1 (20 marks) compulsorily and any three descriptive questions (10×3) from the remaining descriptive questions. Question 1 shall consist of 10 (10 × 2) short answer questions covering the entire syllabus prescribed for the respective examination. The sessional marks shall be finalized with a weightage of 0.75 for the better score and 0.25 for the other.

In the case of soft skills, the two sessional examinations shall be conducted for 50 marks each. The sessional marks shall be finalized with a weightage of 0.75 for the better score and 0.25 for the other and shall be converted to 100 marks

The sessional marks computed as per the above procedure will be finally rounded off to next higher integer.

In any subject if it is not possible to set a question paper of the specified pattern, the chairman BOS can issue guidelines regarding setting of question paper of suitable pattern in that subject. However this must be informed to the students well in advance.

6.7 Supplementary Examinations :

Apart from the regular end examinations, the college may also schedule and conduct supplementary examinations for all subjects for the benefit of students with back logs. Such of the students writing supplementary examinations as supplementary candidates, may have to write more than one examination per day.

Instant examination may be conducted in the theory subjects of 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 backlogs. The instant exam will be conducted normally within one month of the announcement of the final semester results.

6.8 Improvement :

A student can be permitted to improve his / her performance in any end examination of theory subjects that belong to immediately preceding semester only. For example, a student appearing for regular exams of II / I semester can improve in the subjects of I B.Tech only. Similarly a student appearing for regular exams of III / II semester can improve in the subjects of III/I only.

There is no improvement for practical subject, mini project, project work, comprehensive viva and practice school/internship.

However, this facility shall not be availed by a student who has taken the Original Provisional / Degree Certificate.

7.0 GRADE POINT AVERAGE (GPA) AND CUMULATIVE GRADE POINT AVERAGE (CGPA):

The Grade Point Average (GPA) for each semester/year and Cumulative Grade Point Average (CGPA) up to any semester are calculated as follows:

- (i) A year/semester Grade Point Average will be computed as follows:

n

$$\text{GPA} = \frac{\sum C_i \times \text{GP}_i}{\sum C_i}$$

where n is the number of subjects in that year/ semester, C_i = Credits for the subject. GP_i = the Grade Point obtained for the subject and the summation is over all the subjects in that semester.

- (ii) A Cumulative Grade Point Average (CGPA) will be computed for every student at the end of each semester. The CGPA would give the cumulative performance of a student from the first semester upto the end of the semester to which it refers and is calculated as follows.

$$\text{CGPA} = \frac{\sum \text{GPA}_j \times \text{TC}_j}{\sum \text{TC}_j}$$

Where 'm' is the number of year/semesters under consideration. TC_j the total number of credits for a particular year/semester and GPA_j is the Grade Point Average of that semester. Both GPA and CGPA will be rounded off to the second digit after decimal and recorded as such.

- (iii) While computing the GPA/CGPA. the subjects in which the student is awarded Zero grade points will also be included.

7.1 Grade Sheet :

A grade sheet (Memorandum) will be issued to each student indicating his performance in all subjects of that semester in the form of grades and also indicating the GPA and CGPA.

7.2 Transcripts :

After successful completion of the total course of study, a Transcript containing performance of all academic years will be issued as a final record. Duplicate transcripts will also be issued if required after the payment of requisite fee. Partial transcript will also be issued up to any semester to any student on request and by paying the stipulated fee in force.

7.3 Award of Degree:

The degree will be conferred and awarded by Jawaharlal Nehru Technological University on recommendations by the Governing body of GPREC (Autonomous) basing on the eligibility as in 8.1.

8 MINIMUM ACADEMIC REQUIREMENTS :

- 8.1 A student is deemed to have satisfied the minimum academic requirement if he/she scores not less than 35% marks in the end examinations and also minimum 40% of marks in the sum total of the internal evaluation and end examination together in each of the theory and practical subjects including project work etc; and obtains a minimum CGPA of 4.0 which is calculated considering all the years including I B.Tech. However lateral entry students must obtain a CGPA of 4.0 which is calculated considering all the years from II to IV B.Tech.
- 8.2 A student shall be declared to have satisfied the minimum academic requirements and has become eligible for the award of degree if he/she fulfills each of the following conditions.
- (i) Satisfies minimum requirements as stated in 8.1
 - (ii) Satisfies the minimum requirement of attendance as stipulated in clause 4 and
 - (iii) Satisfies all other regulations, academic or otherwise stipulated by the college from time to time.

9. AWARD OF CLASS :

After a student has satisfied the minimum requirements prescribed for the completion of the course as stipulated in clause 8 and has become eligible for the award of degree he/she shall be placed in one of the following classifications based on CGPA.

Division/Class	CGPA
Distinction	≥ 7.5
First Class	≥ 6.5 and < 7.5
Second Class	≥ 5.5 and < 6.5
Pass Class	≥ 4.0 < 5.5

10. : RULES OF DISCIPLINE :

1. Any attempt by any student to influence the teachers, examiners, faculty and staff of Controller of Examinations for undue favours in the exams, and bribing them either for marks or attendance will be treated as malpractice cases and the student can be debarred from the college.
2. When a student absents himself/herself, he/She is treated as to have appeared and obtained zero marks in that subject (s) and Grading is done accordingly.
3. When the performance of the student in any subject(s) is cancelled as a punishment for indiscipline, he is awarded zero marks in that subject(s).
4. When a student's answer book is confiscated for any kind of attempted or suspected malpractice, the decision of the examination committee is final.

11. CONDITIONS OF PROMOTION:

- 11.1 A student shall be eligible for promotion to the I semester of II B.Tech if he/she satisfies the minimum attendance requirements for I B.Tech as stipulated in clause 4.
- 11.2 A student shall be eligible for promotion to the succeeding semester if he/she satisfies the minimum attendance requirements in the current semester as given in clause 4.

12. MINIMUM INSTRUCTION DAYS: Each academic year/semester shall consist of minimum of 144/72 instruction days excluding the days allotted for tests/examinations and preparation holidays.

13. AMENDMENT OF REGULATIONS: The college may, from time to time, revise, amend or change the regulations, scheme of examinations and syllabi

14. TRANSITORY REGULATIONS:

- 14.1 Students who studied the four year B.Tech course as per the previous regulations (Scheme-2008) but who could not satisfy the minimum attendance requirements in any year may join the appropriate year in the these regulations applicable for the batch admitted in 2010-11 and proceed along with that batch for the remaining part of the course and be governed by the regulations of that batch.
- 14.2 Students who were admitted in 2005 or earlier and who satisfied the attendance regulations of scheme 2001, and who are yet to pass some subjects and therefore writing equivalent subjects in scheme 2006 will also be covered by scheme 2006 regulations.
- 14.3 End Examinations under Scheme -2008 shall be conducted three times after the last regular examinations under those regulations.
- 14.4 Students who satisfy the minimum attendance requirements in any year under Scheme 2008 regulations but who are yet to pass some subjects of that year even after utilizing the three chances as stated in 14.2 shall appear for the equivalent subjects specified by the Board of Studies.
- 14.5 The students admitted during 2008-09 or earlier shall complete their course of study within a period of eight academic years starting from the year of admission.

15. GENERAL :

15.1 Whenever ambiguities arise in interpreting the regulations the joint board of studies shall have the powers to issue clarifications and/or to make new rules for removing such ambiguities.

16 Punishments for Malpractice cases - Guidelines

The examinations committee may take the following guidelines into consideration while dealing with the suspected cases of malpractice reported by the invigilators/squad members etc; during end examinations. The punishment may be more severe or less severe depending on the merits of the individual cases.

S. No	Nature of Malpractices/Improper conduct	Punishment
1.	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the student which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
2.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
3.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
4.	Gives assistance or guidance or receives it from any other student orally or by any other body language methods or communicates through cell phones with any other student or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the students involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
5.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the student is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects including practical examinations and project work of that semester/year.
6.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects including practical examinations and project work of that semester/year.
7.	Smuggles in the Answer book or takes out or arranges to send out the question paper during the examination or answer book during or after the examination	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects including practical examinations and project work of that semester/year. The student is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the student is subject to the academic regulations in connection with forfeiture of seat.
8.	Refuses to obey the orders of the Chief Superintendent/Assistant – Superintendent /	In case of students of the college, they shall be expelled from examination

	any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in-charge, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	halls and cancellation of their performance in that subject and all other subjects of that semester/year. The students also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.
9.	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects including practical examinations and project work of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
10.	Possesses any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects including practical examinations and project work of that semester/year. The student is also debarred and forfeits the seat.
11.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 7 to 9.	For Student of the college : Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects including practical examinations and project work of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
12.	Impersonates any other student in connection with the examination	The student who has impersonated shall be expelled from examination hall. The student is debarred from writing the remaining exams, and rusticated from the college for one academic year during which period the

		<p>student will not be permitted to write any exam. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.</p> <p>The performance of the original student who has been impersonated, shall be cancelled in all the subjects of the examination including practicals and project work of that semester/year. The student is rusticated from the college for two consecutive years during which period the student will not be permitted to write any exam. The continuation of the course by the student is subject to the academic regulations in connection with forfeiture of seat.</p>
13.	<p>If any malpractice is detected which is not covered in the above clauses 1 to 12 it shall be reported to the college academic council for further action to award suitable punishment.</p>	
14.	<p>Malpractice cases identified during sessional examinations will be reported to the examination committee nominated by Academic council to award suitable punishment.</p>	