JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
(Established by Govt. Act No. 30 of 2008)
Kukatpally, Hyderabad – 500085, Telangana (India).

ACADEMIC REGULATIONS FOR B.TECH. REGULAR STUDENTS FOR CONSTITUENT ENGINEERING COLLEGES WITH EFFECT FROM THE AY 2025-26 (R-25)

1.0   Under-Graduate Degree Programme in Engineering & Technology (UGP in E&T)

Jawaharlal Nehru Technological University Hyderabad (JNTUH) offers new regulations termed as R25 regulations for four-year (eight semesters) **Bachelor of Technology** (B.Tech.) degree programme, under Choice Based Credit System (CBCS) at its constituent colleges, with effect from the academic year **2025-26.**

2.0   Eligibility for Admission

2.1   Admissions to the undergraduate (UG) programme shall be made either on the basis of the merit rank obtained by the qualified students at the entrance test conducted by Telangana Government (EAPCET) or the University or on the basis of any other order of merit approved by the University, subject to reservations as prescribed by the government from time to time.

2.2   The medium of instruction for the entire undergraduate programme in Engineering & Technology will be **English** only.

3.0   B.Tech. Programme Structure

3.1   A student after securing admission shall complete the B.Tech. programme in a minimum period of **four** academic years and a maximum period of **eight** academic years starting from the date of commencement of first year first semester, failing which student shall forfeit seat in B.Tech. course. Each student has to secure a minimum of 160 credits out of 164 credits for successful completion of the undergraduate programme and award of the B.Tech. degree.

3.2   **UGC/ AICTE** specified definitions/ descriptions are adopted appropriately for various terms and abbreviations used in these academic regulations/ norms.

3.2.1   Semester Scheme

The undergraduate programme is of four academic years and there shall be two semesters in each academic year. There shall be a minimum of 15 weeks of instruction weeks, excluding the mid-term and semester-end exams. Around 15 instruction hours, 30 instruction hours and 45 hours of learning need to be followed per one credit of theory course, practical course and project/field-based learning respectively. In each semester, there shall be 'Continuous Internal Evaluation (CIE)' and 'Semester End

Examination (SEE)' under Choice Based Credit System (CBCS). The curriculum/course

structure suggested by AICTE is followed as a reference document.

3.2.2 Credit Courses

All courses offered in each semester are to be registered by the student. Against each course in the course structure, the L: T: P: C (lecture periods: tutorial periods: practical periods: credits) pattern has been defined.

- One credit is allocated for one hour per week in a semester for lecture (L) or Tutorial (T) session.
- One credit is allocated for two hours per week in a semester for Laboratory/ Practical (P) session.
- One credit is allocated for three hours per week in a semester for Project/Mini-Project session.

3.2.3 Subject Course Classification

All subjects/courses offered for the undergraduate programme in E&T (B.Tech. degree programmes) are broadly classified as follows.

S. No.	Broad Course Classification	Course Group/ Category	Course Description
1	Foundation Courses (FnC)	BS – Basic Sciences	Includes Mathematics, Physics and Chemistry courses
2		ES - Engineering Sciences	Includes Fundamental Engineering Courses
3		HS – Humanities and Social Sciences	Includes courses related to Humanities, Social Sciences and Management
4	Core Courses (CoC)	PC – Professional Core	Includes core courses related to the parent branch of Engineering.
5	Elective Courses (EℓC)	PE – Professional Electives	Includes elective courses related to the parent branch of Engineering.
6		OE – Open Electives	Elective courses which include inter-disciplinary courses or courses in an area outside the parent branch of Engineering.
7	Other Core Courses (OCC)	Project Work	B.Tech. Project Work
8		Industry Training/ Internship/ Industry Oriented Mini-project/Skill Development Courses	Industry Training/ Internship/ Industry Oriented Mini- Project/Skill Development Courses
9		Seminar	Seminar based on core contents related to parent branch of Engineering.
10	Value Added Courses (VAC)	-	Courses to build professional values, traditional knowledge and sensitization of societal issues

4.0   Mandatory Induction Programme

An induction program of one-week duration for the UG students entering the institution, right at the start shall be implemented. Normal classes commence only after the induction programme is conducted. Following activities could be part of the induction programme: i) Physical Activity, ii) Creative Arts, iii) Imparting Universal Human Values, iv) Literary Activities, v) Lectures by Eminent People, vi) Visits to Local Areas and vii) Familiarization to department as well as entire institute and viii) Making students understand Innovative practices at the college premises etc.

5.0   Course Registration

5.1   A faculty advisor / mentor shall be assigned to a group of around 20 students, who will advise the students about the undergraduate programme, its course structure and curriculum, choices/options of the courses, based on their competence, progress, pre- requisites and interest.

5.2   The academic section of the college invites 'registration forms' from students before the beginning of the semester through 'on-line registration', ensuring 'date and time stamping'. The online registration requests for semester courses shall be completed two weeks before the commencement of SEEs (Semester End Examinations) of the preceding semester.

5.3   A student can apply for **on-line** registration, **only after** obtaining the '**written approval**' from faculty advisor/mentor, which should be submitted to the college academic section through the Head of the Department. A copy of it shall be retained with the Head of the Department, faculty advisor/ mentor and the student.

5.4   A student shall register for all the courses offered in a semester as specified in the course structure.

5.5   Course options exercised through **on-line** registration are final and **cannot** be changed; further, alternative choices also will not be considered. However, if the course that has already been listed for registration by the Head of the Department in a semester could not be offered due to any inevitable or unexpected reasons, then the student shall be allowed to have alternative choice either for a new course (subject to offering of such a course), or for another existing course. Such alternative arrangements will be made by the Head of the Department, with due notification and time-framed schedule, within **a week**, but before the commencement of class- work of the semester.

5.6   The Head of the Department / Course Coordinator should review vacant slots in the timetable of each section once in every week or fortnight. The vacant slots in the time- table may be allocated to the subject teachers who could not take classes in proportion to the number of weeks completed from the commencement of the semester.

5.7   **Professional Electives**: The students have to choose six Professional Electives (PE-I to PE-VI) from the six baskets of professional electives given.

Students have the flexibility to choose from the list of professional electives offered by the Institute or opt to register for the equivalent MOOCS courses as listed from time to time by the University.

5.8   **Open Electives**: Students have to choose three Open Electives (OE-I, II & III) from three

baskets of Open Electives given by other than the parent department.

5.9   Provision for Early Registration of MOOCS Courses:

For a professional elective in a semester, students are allowed to register for an equivalent MOOCs course listed from time to time by the University one semester in advance. For example, a Professional Elective of III Year II Sem shall be allowed to register under MOOCs platform in III year I Sem.

The credits earned in one semester in advance can be submitted in the subsequent semester for the assessment.

The students who have registered in advance in an equivalent MOOCs course and fail to secure any pass grade in the MOOCs course, can register for the regular course offered in the following semester of their course structure.

5.10   Conversion of Marks Secured in MOOCs into Grades: Marks secured in the internal and external evaluations of a MOOCs course shall be scaled to 40 and 60 marks respectively. The sum of these two components shall be considered as the total marks out of 100. The corresponding grade shall then be determined as per the marks-to-grades conversion rules specified.

For the course selected under MOOCS platform following guidelines may be followed:

i. Prior to registration of MOOCS courses, formal approval of the courses by the University/College is essential. The approval is based on the parameters like the institute / agency offering the course, syllabus, credits, duration of the programme and mode of evaluation etc.

ii. Minimum credits for MOOCs course must be equal to or more than the credits specified in the course structure provided by the University/College.

iii. Only grades/marks above pass-grade/pass-marks shall be considered for inclusion of grades in grade memo.

iv. Any expenses incurred for the MOOCS courses are to be met by the students only.

v. If a student fails the MOOC course, they will be required to take a descriptive-type examination for the same course in their respective department.

5.11   MOOCs are allowed for professional elective courses and for a few Minors & Honors courses.

5.12   Additional learning resources:

Students are encouraged to acquire additional course-related knowledge by auditing learning resources from MOOCS platforms for each course offered in their course structure. These additional courses are not meant for earning credits but are intended to enhance knowledge. The university shall notify such courses from time to time through their portals for the benefit of students. They are categorized into three types: prerequisite, reinforcement, and aspirational. Prerequisite courses help students gain familiarity and provide sufficient background. Reinforcement courses aim to offer different perspectives on learning, while aspirational courses focus on next-level or advanced learning.

6.0   Rules to offer Elective courses

6.1   An elective course may be offered to the students, **only if** a minimum of 25% of class strength opts for it.

6.2   Same elective course for different sections may be offered by different faculty members. The selection of elective course by students will be based on - **first come first serve** and / or CGPA criterion.

6.3   If the number of students registrations are more than the strength of one section, then it is choice of the concerned Department to offer the same course for more than one section based on the resources available in the department.

7.0   Attendance requirements:

7.1   A student shall be eligible to appear for the semester-end examinations, if the student acquires a minimum of 75% of aggregate attendance of all the courses for that semester. **Two hours** of attendance for each theory course shall be considered, if the student appears for the mid- term examination of that course.

7.2   Shortage of attendance in aggregate upto 10% (securing 65% and above but below 75%) in each semester may be condoned by the college academic committee on genuine and valid grounds, based on the student's representation with supporting evidence.

7.3   A stipulated fee shall be payable for condoning of shortage of attendance as notified in the respective college websites.

7.4   Shortage of attendance below 65% in aggregate shall in **no** case be condoned.

7.5   Students whose shortage of attendance is not condoned in any semester, are not eligible to take their semester-end examinations of that semester. They get detained and their registration for that semester shall stand cancelled, including internal marks. They will not be promoted to the next semester. They may seek re-registration for that semester in the next academic year.

7.6   A student fulfilling the attendance requirement in the present semester shall not be eligible for readmission into the same semester.

8.0   Criteria for credits earning in a course

8.1   A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each course, if the student secures not less than 35% (21 marks out of 60 marks) in the semester end examinations (SEE), and a minimum of 40% (40 marks out of 100 marks) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together; in terms of letter grades, this implies securing **'C'** grade or above in that course.

8.2   A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to Field Based Research Project / Industry Oriented Mini Project / Internship, if the student secures not less than 40% marks (i.e. 40 out of 100 allotted marks) in each of them. The student is deemed to have failed, if he/she (i) does not submit a report on Field-Based Research Project/Industry Oriented Mini Project/ Internship, or (ii) not make

a presentation of the same before the evaluation committee as per schedule, or (iii) secures less than 40% marks in Field-Based Research Project / Industry Oriented Mini Project / Internship evaluations.

8.3   A student eligible to appear in the semester-end examination for any course, is absent from it or failed (thereby failing to secure **'C'** grade or above) may re-appear for that course in the supplementary examination as and when it is conducted. In such cases, internal marks (CIE) assessed earlier for that course will be carried over, and added to the marks obtained in the SEE supplementary/make-up examination. If the student secures sufficient marks for passing, **'C'** grade or above shall be awarded as specified in clause 10.3.

9.0   Distribution of Marks and Evaluation

9.1   The performance of a student in every course (including Value Added Courses and Skill Development Courses, Laboratory/Practical and Project Work) will be evaluated for 100 marks each, with 40 marks allotted for CIE (Continuous Internal Evaluation) and 60 marks for SEE (Semester End-Examination), irrespective of the credits allocated.

9.2   In CIE, for theory courses, during a semester, there shall be two mid-term examinations. Each Mid-Term examination consists of two parts i) **Part – A** for 10 marks, ii) **Part – B** for 25 marks, totaling to 35 marks. Total duration of mid-term examination is two hours.

The objective/quiz paper is set with multiple choice, *fill-in the blanks* and *match the following* type of questions for a total of 10 marks. The descriptive paper shall contain 7 questions out of which, the student has to answer 5 questions, each carrying 5 marks. The **average of the two Mid-Term Examinations** shall be taken as the final marks for Mid-Term Examination for 35 marks.

The remaining five marks of Continuous Internal Evaluation (CIE) are allotted for Assignments. The student shall submit two assignments for each course. The student shall submit the first assignment before the conduct of the first mid-term examination, and the second assignment before the conduct of the second mid-term examination. Each assignment shall be evaluated for five marks; and the average of these two assignments shall be taken as the assignment component of five marks.

While the first mid-term examination shall be conducted on 50% of the syllabus, the second mid-term examination shall be conducted on the remaining 50% of the syllabus.

Mandatory/Non-Credit/Audit Courses are evaluated for 100 internal marks. A student shall secure 40% of marks (40 marks out of 100 marks) in the CIE for passing the same.

9.3   A Makeup Mid Exam before SEE with prior permission of concern Department is available for students who:
(i) Missed one of the two mid-term examinations due to unavoidable circumstances with a fee payment of Rs 500/- per subject. This Mid Exam will be conducted at the end of the semester covering total syllabus and will carry a total of 35 marks.
 (ii) Improvement of internal marks in a single attempt is permitted after completion of the programme duration and coursework, upon payment of a fee of Rs. 5,000 per subject. A special notification regarding this will be issued after the completion of the programme duration.

9.4   Semester End Examination for theory courses

The semester end examinations (SEE), for theory courses, will be conducted for 60 marks consisting of two parts viz. i) **Part- A** for 10 marks and ii) **Part - B** for 50 marks.

- Part-A is compulsory, consists of five short answer questions covering all units of syllabus; each question carries two marks.
  Part-B consists of five questions carrying 10 marks each. There shall be two questions asked in the question paper from each unit with either-or choice and the student should answer either of the two questions. The student shall answer one question from each of five units.
- The duration of Semester End Examination is 3 hours.

9.5   Semester End Examination for Practical Courses

For practical courses there shall be a Continuous Internal Evaluation (CIE) during the semester for 40 marks and semester-end examination for 60 marks. The breakup of the continuous internal evaluation for 40 marks is as follows:

1. A write-up on day-to-day experiments in the laboratory (in terms of aim, components/procedure, expected outcome) which shall be evaluated for 10 marks
2. **10 marks for viva-voce (**or) tutorial (or) case study (or) application (or) poster presentation of the course concerned.
3. Internal practical examination conducted by the laboratory teacher concerned for 10 marks.
4. The remaining 10 marks are for Laboratory Report/Project and Presentation, which consists of the Design (or) Software / Hardware Model Presentation (or) App Development (or) Prototype submission which shall be evaluated after completion of laboratory course and before semester end practical examination.

The Semester End Examination for practical courses shall be conducted with an external examiner and the laboratory course teacher. The external examiner shall be appointed from the college outside their cluster as well as group college.

In the Semester End Examination for practical courses held for 3 hours, rubrics of evaluation for 60 marks is as given below:

1. 10 marks for write-up
2. 15 for experiment/program
3. 15 for evaluation of results
4. 10 marks for presentation on another experiment/program in the same laboratory course and
5. 10 marks for viva-voce on concerned laboratory course.

For any change of experiment, 5 marks will be deducted from the total of 60 marks. If second time change of experiment is requested, 10 marks will be deducted from the 60 marks. No third change will be permitted.

9.6 There shall be a Field-based Research Project in the intervening summer between II-II and III- I Semesters. Students will register for this immediately after II Year II Semester examinations and pursue it during summer vacation. The Field-based Research Project shall

be submitted in a report form and presented before the committee in III year I semester. It shall be evaluated for 100 external marks. The evaluation committee shall consist of an External Examiner, Head of the Department, Supervisor of the Project and a Senior Faculty Member of the department. There shall be no internal marks for Field- based Research Project. Student shall have to earn 40% marks, i.e 40 marks out of 100 marks. The student is deemed to have failed, if he (i) does not submit a report on the Project, or (ii) does not make a presentation of the same before the internal committee as per schedule, or (iii) secures less than 40% marks in this course.

9.7 There shall be an Internship/Industry Oriented Mini Project in collaboration with an industry from their specialization. Students shall register for this immediately after III Year II Semester Examinations and pursue it during summer vacation. Internship at reputed organization (or) Industry Oriented Mini Project shall be submitted in a report form and presented before the committee in IV Year I Semester before the semester end examination. It shall be evaluated for 100 external marks. The committee consists of an External Examiner, Head of the Department, Supervisor of the Industry Oriented Mini Project/Internship, and a Senior Faculty Member of the Department.

9.8 It is preferable to have External Examiner from the Industry for the evaluation of industry oriented mini-project.

9.9 The UG project work shall be initiated at the beginning of the IV Year II Semester and the duration of the project work is one semester. The student must present in consultation with his/her supervisor, the title, objective and plan of action of his/her Project work to the departmental committee for approval within two weeks from the commencement of IV Year II Semester. Only after obtaining the approval of the departmental committee, the student can start his/her project work.

9.10 Student has to submit project work report at the end of IV Year II Semester. The project work shall be evaluated for 100 marks. Out of which 40 marks and 60 marks are allocated for CIE and External Evaluation respectively.

9.11 For project work, the external examiner shall evaluate the project work for 60 marks and the internal project committee shall evaluate it for 40 marks. Out of 40 internal marks, the departmental committee consisting of Head of the Department, Project Supervisor and a Senior Faculty Member shall evaluate the project work for 20 marks and Project Supervisor shall evaluate for 20 marks. The topics for main Project shall be different from the topic of Industry Oriented Mini Project/ Internship/SDC. The student is deemed to have failed, if he (i) does not submit a report on the Project, or (ii) does not make a presentation of the same before the External Examiner as per schedule, or (iii)secures less than 40% marks in the sum total of the CIE and SEE taken together.

For conducting viva-voce exam of project work, University appoints an external examiner. The external examiner may be selected from the list of experts submitted by the Principal of the College.

A student who has failed, may re-appear once for the above evaluation, when it is scheduled again; if student fails in such 'one re-appearance' evaluation also, he/she has to appear for the same in the next subsequent year, as and when it is scheduled.

9.12 There are four Skill Development Courses included in the Curriculum in II-1, II-2, III-1 and III-2 semesters. Each Skill Development Course carries one credit. The evaluation pattern will be the same as that for a laboratory course including internal and external assessments.

The objective of Skill Courses is to develop the cognitive skills as well as the psycho-motor skills.

10.0 Grading Procedure

10.1 Absolute grading system is followed for awarding the grade to each course.

10.2 Grades will be awarded to indicate the performance of students in each Theory, Laboratory, Industry-Oriented Mini Project/ Internship/ Skill development course and

Project Work. Based on the percentage of marks obtained (Continuous Internal Evaluation plus Semester End Examination, both taken together) as specified in clause 8 above, a letter grade shall be given.

10.3 To measure the performance of a student, a 10-point grading system is followed. The mapping between the percentage of marks secured and the corresponding letter grade is as follows:

Range of % of Marks Secured in a Course	Letter Grade	Grade Points (GP)
Greater than or equal to 90	O (Outstanding)	10
80 and less than 90	A$^+$ (Excellent)	9
70 and less than 80	A (Very Good)	8
60 and less than 70	B$^+$ (Good)	7
50 and less than 60	B (Average)	6
40 and less than 50	C (Pass)	5
Below 40	U (Under Performance)	0
Absent	Ab	0

10.4 A student shall be declared successful or 'passed' in a semester, if he/she secures **'C'** grade or above in every course (i.e GP $\geq$ 5)

10.5 A student who has obtained an **'F'** grade in any course shall be deemed to have **'failed'** and is required to reappear for a supplementary exam as and when conducted. In such cases, internal marks in those courses will remain the same as those obtained earlier.

10.6 To a student who has not appeared for an examination in any course, **'Ab'** grade will be allocated in that course, and he/she is deemed to have **'Failed'**. Such student will be required to reappear for supplementary/make-up exam as and when conducted. The internal marks in those courses will remain the same as those obtained earlier.

10.7 The students earn a Grade Point (G) in each course, on the basis of letter grade secured in that course. Every student who passes a course will receive grade point **G $\geq$ 5** ('C' grade or above).

10.8 The 'Credit Points' (C) are computed by multiplying the grade point with credits for a given course.

Credit Points (C) = Grade Point (G) x Credits

10.9 The Semester Grade Point Average (SGPA) is calculated only when all the courses offered in a semester are passed by a student. It is calculated by dividing the sum of credit points (ΣCG) secured from all courses registered in a semester, by the total number of credits registered during that semester. SGPA is rounded off to **two** decimal places. SGPA for each semester is thus computed as

$$\text{SGPA} = \{ \textstyle\sum_{i=1}^{N} C_i\,G_i \} / \{ \textstyle\sum_{i=1}^{N} C_i \}$$

where 'i' is the course indicator index (considering all courses in a semester), 'N' is the no. of courses registered for the semester (as listed under the course structure of the branch), C_i is the no. of credits allotted to the ith course, and G_i represents the grade points corresponding to the letter grade awarded for that i^{th} course.

10.10 If a student earns more than 160 credits, only the courses corresponding to the best 160 credits shall be considered for the computation of CGPA of B.Tech. degree.

10.11 The Cumulative Grade Point Average (CGPA) is a measure of the overall cumulative performance of a student in all semesters considered for registration. The CGPA is the ratio of the total credit points secured by a student for the courses correspond to best 160 credits out of **all** registered courses in **all** semesters, and the total number of credits correspond to those selected courses. CGPA is rounded off to **two** decimal places. CGPA is thus computed at the end of each semester, from the I year II semester onwards, as per the formula

$$\text{CGPA} = \{ \textstyle\sum_{j=1}^{M} C_j\,G_j \} / \{ \textstyle\sum_{j=1}^{M} C_j \}$$

where '**M**' is the total no. of courses corresponding to the best 160 credits from the courses registered in all eight semesters, 'j' is the course indicator index (takes into account all courses from 1 to 8 semesters), C_j is the no. of credits allotted to the jth course, and G_j represents the grade points (GP) corresponding to the letter grade awarded for that j^{th} course.

Illustration of the Calculation of SGPA:

Course	Credits	Letter Grade	Grade Points	Credit Points
Course 1	4	A	8	4 x 8 = 32
Course 2	3	O	10	3 x 10 = 30
Course 3	3	C	5	3 x 5 = 15
Course 4	3	B	6	3 x 6 = 18
Course 5	3	A	8	3 x 8 = 24
Course 6	2	A+	9	2 x 9 = 18
Course 7	1	C	5	1 x 5 = 5
Course 8	1	O	10	1 x 10 = 10
	20			152

SGPA = 152/20 = 7.6

The CGPA of the entire B.Tech. programme shall be calculated considering the best 160 credits earned by the student.

10.12 For merit ranking or comparison purposes or any other listing, **only** the '**rounded off**' values of the CGPAs will be used.

10.13 SGPA of a semester will be mentioned in the semester Memorandum of Grades if all courses of that semester are passed in first attempt. Otherwise, the SGPA shall be mentioned to represent no. of attempts (* for single, ** for double) only on the Memorandum of Grades in which sitting he passed his last exam in that semester.

11.0 Declaration of Results and issue of Grade Memo

11.1 While declaring the results, the web-version should display the marks earned by the students with the internal and external marks break-up. However, in the memorandum of grades, the marks need not be shown.

11.2 After the completion of each semester, a certificate of memorandum of grades shall be issued to all the registered students, indicating the letter grades and credits earned. It will show the details of the courses registered (course code, course title, no. of credits), letter grade and credits earned.

12.0 Withholding of Results

12.1 If the student has not paid the fees to the University at any stage, or has dues pending due to any reason whatsoever, or if any case of indiscipline is pending, the result of the student may

be withheld, and the student will not be allowed to go into the next higher semester. The award or issue of the degree may also be withheld in such cases.

13.0 Supplementary Exams:

13.1 At the end of each semester, along with regular semester examinations, supplementary examinations shall be conducted for the students who have back-log subjects.

13.2 Advanced supplementary examinations in IV Year II Semester courses may be conducted for those who failed in any course offered in IV Year II Semester. It may enable the students to receive their B.Tech. provisional certificate at an early date. There shall be no supplementary examination in the successive semester. The students who could not secure any pass grade in advance supplementary examinations have to wait for regular series examination of next batch to write their back-log examination.

14.0 Promotion Rules

S.No.	Promotion	Conditions to be Fulfilled
1	First year first semester to first year second semester	Regular course of study of first year first semester and fulfilment of attendance requirement.
2	First year second semester to Second year first semester	(i) Regular course of study of first year second semester and fulfilment of attendance requirement (ii) Must have secured at least 25% of the total credits up to first year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.

3.	Second year first semester to Second year second semester	Regular course of study of second year first semester and fulfilment of attendance requirement.
4	Second year second semester to Third year first semester	(i) Regular course of study of second year second semester and fulfilment of attendance requirement. (ii) Must have secured at least 25% of the total credits up to second year second semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
5	Third year first semester to Third year second semester	Regular course of study of third year first semester and fulfilment of attendance requirement.
6	Third year second semester to Fourth year first semester	Regular course of study of third year second semester and fulfilment of attendance requirement.
7	Fourth year first semester to Fourth year second semester	Regular course of study of fourth year first semester and fulfilment of attendance requirement.

15.0 Re-admission after Detention

i) A student detained due to lack of credits, shall be promoted to the next academic year only after acquiring the required number of credits.

ii) A student detained due to shortage of attendance shall be admitted in the same semester in the successive academic years.

iii) When a student is readmitted in the successive academic years, the academic regulations under which the student seeks re-admission shall only be applicable to this student, but not the academic regulations in which he got admitted in his/her first year of study.

16.0 Credit Exemption

A student (i) shall register for all courses covering 164 credits as specified and listed in the course structure and (ii) earn 160 or more credits to successfully complete the undergraduate programme.

- Best 160 credits shall be considered for CGPA computation. The student can avail exemption of courses *totaling up to 4 credits* other than Professional core courses, Laboratory Courses, Seminars, Project Work and Field Based Research Project / Industry Oriented Mini Project / Internship, for optional drop out from these 164 credits registered;

- The semester grade point average (SGPA) of each semester shall be mentioned at the bottom of the grade card, when all the subjects in that semester have been passed by the student.

17.0 Award of Degree

17.1 A student who registers for all the specified courses as listed in the course structure and secures the required number of 160 credits within 8 academic years from the date of commencement of the first academic year, shall be declared to have '**qualified**' for the

award of B.Tech. degree in the branch of Engineering selected at the time of admission.

17.2 A student who qualifies for the award of the degree as listed in item 17.1 shall be placed in the following classes.

17.3 A student with SGPA in all semesters ≥ 7.5 shall be placed in '**First Class with Distinction'**
by fulfilling the following conditions:

(i) Should have passed all the courses in '**First Appearance'**.

(ii) Should not have been detained or prevented from writing the semester end examinations in any semester due to shortage of attendance or any other reason.

17.4 Students with final CGPA (at the end of the undergraduate programme) ≥ 7.0 but <

8.00 shall be placed in '**First Class'.**

17.5 Students with final CGPA (at the end of the undergraduate programme) ≥ 6.00 but < 7.00, shall be placed in '**Second Class'**.

17.6 All other students who qualify for the award of the degree (as per item 13.1), with final CGPA (at the end of the undergraduate programme) ≥ 5.00 but < 6, shall be placed in '**pass class**'.

17.7 Grace Marks

Grace marks shall be given to those students who complete the course work of four year B. Tech. degree, not secured pass grade in not more than three subjects and adding a specified grace marks enables the student to pass the subject(s) as well as gets eligibility to receive the provisional degree certificate.

Grace marks for students admitted under the R25 Academic Regulations should not exceed **0.15%** of the total maximum marks in all eight semesters (excluding the marks allocated for value added courses and skill development courses). The grace marks shall only be added if a student fails in a maximum of three courses and adding the above grace marks make the student eligible to receive the provisional degree certificate.

18.0 Award of Gold Medals

18.1 Students fulfilling the conditions listed under item 17.3 alone will be eligible for award of '**Gold Medal**'.

18.2 If more than one student secures the same highest CGPA, then the following tie resolution criteria, in the same order of preference shall be followed for selecting the Gold Medal winner, until the tie is resolved: i) Who secured highest marks ii) more number of times secured highest SGPAs, iii) more number of O and A+ grades in that order and iv) highest SGPA in the order of first semester to eight semester.

19.0 Conversion of CGPA into equivalent Percentage of Marks

19.1 The following formula shall be used for the conversion of CGPA into equivalent marks, whenever it is necessary

$$\text{Percentage (\%) of Marks} = (\text{Final CGPA} - 0.5) \times 10$$

20.0   Honours and Minor Degree Programs

Honours and Minor Degree programs will be available in all branches of B.Tech. degree. Minor Degree programs will commence from II Year II Semester and continue till IV Year I semester and Honours Degree programs will commence from III Year I Semester and continue till IV Year II semester.

21.0   Multiple Entry Multiple Exit Scheme (MEME)

21.1   Exit Option after Second Year:

Students enrolled in the 4-Year B.Tech. program are permitted to exit the program after successful completion of the second year (B.Tech. II Year II Semester). The students who desire to exit after the II year shall formally inform the exit plan one semester in advance i.e. at the commencement of II Year II Semester itself. Such students need to fulfil the additional requirements as specified in Clause 21.2 described below.

Upon fulfilling the requirements like earning all the credits up to II Year II Semester and successfully completing the additional requirements, the students will be awarded a 2-Year Undergraduate (UG) Diploma in the concerned engineering branch.

21.2   Additional Requirements for Diploma Award

To qualify for the diploma under the exit option, students must also complete 2 additional credits through one of the following University-prescribed pathways:

Work-based Vocational Course:

Participation in a practical, hands-on vocational training program relevant to the engineering field, typically conducted during the summer term.

Internship/Apprenticeship:

Completion of a minimum 8-week internship or apprenticeship in their related field to gain practical industry exposure.

In addition, students must clear any associated course(s) or submit the internship/ apprenticeship report as per the University's schedule and guidelines.

21.3   Re-entry into the B.Tech. Program

Students who have exited the B.Tech. program with a 2-Year UG Diploma may apply for re- entry into the Third Year (Fifth Semester) of the B.Tech. program. Re-entry is subject to the following conditions:

- The student must surrender the awarded UG Diploma Certificate.
- Students who wish to rejoin in III Year must join the same B.Tech. program and same college from which the student has studied. Students should check for continuation of the same branch at the college before rejoining. If the specific branch is closed in that particular college, then student should consult the University for the possible alternative solutions.
- Re-registered students will be governed by the academic regulations in effect at the time of re-entry, regardless of the original regulations under which they were admitted.

- If a student opts to continue their studies without a gap after being awarded the diploma, they must register for the third-year courses before the commencement of classwork.

21.4 Break in Study and Maximum Duration

Students are allowed to take a break of up to four years after completion of II Year II Semester with prior University permission through the Principal of the college.

Re-entry after such a break is subject to the condition that the student completes all academic requirements within twice the duration of the program (i.e., within 8 years for a 4-year B.Tech. program).

22.0 Transitory Regulations for the students re-admitted in R25 Regulations:

22.1 Transitory regulations are applicable to the students detained due to shortage of attendance as well as detained due to the shortage of credits and seeks permission to re-join the B.Tech. programme, where R25 regulations are in force.

22.2 A student detained due to shortage of attendance and re-admitted in R-25 regulations: Such students shall be permitted to join the same semester, but in R25 Regulations.

22.3 A student detained due to shortage of credits and re-admitted in R-25 regulations: Such students shall be promoted to the next semester in R-25 regulations, only after acquiring the required number of credits as per the corresponding regulations of his/her previous semester.

22.4 A student who has failed in any course in a specific regulation has to pass those courses in the same regulations.

22.5 If a student is readmitted to R25 Regulations and has any course with 80% of syllabus common with his/her previous regulations, that particular course in R25 Regulations will be substituted by an equivalent course of R22 regulations by the University. All these details are summarized in a set of look-up Table; one set for each B. Tech. branch.

22.6 Look Up Table of equivalence courses

A lookup table will be provided for the benefit of students and Principals. This lookup table will include all the courses to be registered by students who have been re-admitted under the R25 Academic Regulations from the R22 Academic Regulations. Separate lookup tables will be provided for the following categories of students:

1. Students re-admitted into the I Year II Semester of the R25 Regulations
2. Students re-admitted into the II Year I Semester of the R25 Regulations
3. Students re-admitted into the II Year II Semester of the R25 Regulations
4. Students re-admitted into the III Year I Semester of the R25 Regulations
5. Students re-admitted into the III Year II Semester of the R25 Regulations
6. Students re-admitted into the IV Year I Semester of the R25 Regulations
7. Students re-admitted into the IV Year II Semester of the R25 Regulations

For every B.Tech. branch there shall be separate set of seven lookup tables.

Applicability of Look-up Table: The above look-up table shall be applicable for i) students

who seek readmission from R22 regulations to R25 regulation and are going to be re-admitted in the same college and ii) detained students of one JNTUH affiliated non-autonomous college who seek admission into another JNTUH affiliated non-autonomous college.

For these two categories of students, the Principals of the affiliated colleges need not consult the University for the equivalence courses. However the Principals need to inform in the specified format, the list of such students and equivalences derived from the transitory regulations.

22.7 The R25 Academic Regulations are applicable to a student from the year of re-admission. However, the student is required to complete the study of B.Tech. degree within the stipulated period of eight academic years from the year of first admission.

23.0   Student Transfers

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

23.2 There shall be no transfers from one college to another within the constituent colleges and units of Jawaharlal Nehru Technological University Hyderabad.

24.0   Minors and Honors

A student can choose either Honors or one of the Minors Courses during the study of B.Tech. degree.

Minors

24.1 Every core engineering branch shall offer one or more Minor degrees in their respective branches. Each Minor degree carries a weightage of 18 credits. The Minor shall commence from II year II semester and be completed in IV-I semester.

24.2 i) A student should earn all the credits till I Year II Semester in the first attempt only. In case of lateral entry student, their rank is considered for eligibility

ii) Registration to a minor program is purely the choice of the student. The top 50% of the total eligible students in the class in each specialization are eligible to register for minor degree programs.

iii) The duration of the course and all the academic regulations are on par with regular 4-years
B. Tech. program.

iv) The weekly instruction hours, internal and external evaluation, and award of grades for courses registered in minor program are on par with courses of 4-year B.Tech. program.

v) There shall be a minor project in IV-I semester; the student is expected to carryout a project work using the knowledge he gained from his parent engineering branch and the Minor in which he registered. In other words, this minor project work must be multi-disciplinary in nature.

vi) The duration of the course and all the academic regulations are on par with regular 4-years
B. Tech. program.

vii) The weekly instruction hours, internal and external evaluation, and award of grades for courses registered in minor program are on par with courses of 4-year B.Tech. program. For MOOCS Platform refer 5.9

24.3 Minor degree is co-terminus; if a student earns the required credits for the award of his B.Tech. degree but having a few backlogs in the Minor degree and apply for the Provisional Certificate (PC), the student has to forego his Minor degree. The student cannot appear supplementary exams to clear his backlog subjects of the Minor degree, once the PC is issued.

24.4 i) A student can choose only one minor program along with his/her basic engineering degree. A student who chooses an honours program is not eligible to choose a minor program and vice- versa.

ii) A student can graduate with a minor if he/she fulfils the requirements of regular B.Tech. program and the requirements of minor program.

24.5 **Registration for the Courses in Minor Program**

i) At the beginning of each semester, just before the commencement of classes, students shall register for the courses/subjects listed in the course structure of minors program along with the courses/subjects of regular B.Tech. program.

ii) The maximum number of courses/subjects a student can register in a minor program in a semester is limited to two (three in case a laboratory course is included in the course structure for the semester).

iii) The registration fee is Rs. 2000/- per one credit.

Honors

24.6 Every core engineering branch offers Honors degree in their respective branches. Honors degree carries a weightage of 20 credits. The Honors degree shall commence from III year I semester and be completed in IV-II semester.

24.7 The students are eligible to apply for the Honors only if they clear every subject that they register, in first attempt and maintains a CGPA of 7.5 up to II year II Sem.

24.8 An Honours degree shall be awarded to students only if they pass every registered subject in their first attempt in all eight semesters of the B.Tech. programme.

24.9 Honors is co-terminus; if a student earns the required credits for the award of his B. Tech. degree but not earned the required credits for Honors, and applies for the Provisional Certificate (PC), the student has to forego his Honors degree.

24.10 The list of students enrolled for each Minor and Honors Degree shall be intimated to the Department by the college Principal within before the commencement of the II year II semester and III year I semester respectively.

25.0 **Value Added Courses**

25.1 Faculty members who have received a certificate in Innovation and Entrepreneurship / Entrepreneurship from a reputed foundation/organization may be given preference to teach the "Innovation and Entrepreneurship" course. This certificate course should include an assessment. Total training duration (online or physical), excluding assessment, should be

at least 30 hours. Faculty members from all disciplines with innovative mindset and aptitude to co-create an entrepreneurial ecosystem are eligible to teach this subject.

25.2 Faculty members who have credited a course on Intellectual Property Rights in their UG or PG programme or credited an equivalent course in MOOCS platform/ reputed foundation/organization in which assessment is a part, may be given preference to teach the elective course on Intellectual Property Rights.

26.0 Mapping with the Sustainable Development Goals

All the courses specified in the course structure of every programme are mapped with the one or more sustainable development goals.

27.0 Scope

27.1 The academic regulations should be read as a whole, for the purpose of any interpretation.

27.2 In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice-Chancellor is final.

27.3 The University may change or amend the academic regulations, course structure or syllabi at any time, and the changes or amendments made shall be applicable to all students with effect from the dates notified by the University authorities.

27.4 Where the words "he", "him", "his", occur in the regulations, they include "she", "her", "hers".

28.0 Academic Regulations for B.Tech (Lateral Entry Scheme) from the Academic Year 2026-2027

28.1 Eligibility for the award of B.Tech Degree (LES)

The LES students after securing admission shall pursue a course of study for not less than three academic years and not more than six academic years.

28.2 The student shall register for 123 credits and secure 120 credits with CGPA ≥ 5 from II year to IV-year for the award of B.Tech degree.

28.3 The students, who fail to fulfill the requirement for the award of the degree in six academic years from the year of admission, shall be forfeited their seat in B.Tech.

28.4 The attendance requirements of B. Tech. (Regular) shall be applicable to B.Tech (LES).

28.5 All the other regulations as applicable to B. Tech. 4-year degree course (Regular) will hold good for B. Tech. (Lateral Entry Scheme).

28.6 LES students are not eligible for 2-Year B. Tech. Diploma Certificate.

28.7 Promotion rule

S.No	Promotion	Conditions to be fulfilled
1	Second year first semester to second year second semester	Regular course of study of second year first semester.

2	Second year second semester to third year first semester	(i) Regular course of study of second year second semester. (ii) Must have secured 25% credits up to second year second semester from all the relevant regular and supplementary examinations, whether the student appears in those examinations or not.
3	Third year first semester	Regular course of study of third year first semester.
4	Third year second semester to fourth year first semester	Regular course of study of third year first semester.
5.	Fourth year first semester to fourth year second semester	Regular course of study of fourth year first semester.