(An UGC Autonomous Institution – Affiliated to JNTUH) Ibrahimpatnam, Ranga Reddy (District) - 501 506.



ACADEMIC REGULATIONS GNITC – R21

for
UG- B.Tech. programme
(Applicable for the batches admitted from 2021-2022)





(An UGC Autonomous Institution – Affiliated to JNTUH) Ibrahimpatnam, Ranga Reddy (District) - 501 506.

<u>ACADAMIC REGULATIONS – GNITC-R21 UNDER - CBCS for B.Tech.</u> <u>PROGRAMMES</u>

(Effective for the students admitted into I year from the Academic Year **2021-22** onwards)

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

GNITC offers 4 Year (8 Semesters) **Bachelor of Technology** (B.Tech.) Degree Programme under **Choice Based Credit System** (CBCS) with effect from the Academic Year 2021 - 2022 onwards, in the following disciplines.

S.No	Branch			
I	Civil Engineering			
II	Electrical and Electronics Engineering			
III	Mechanical Engineering			
IV	Electronics and Communication			
	Engineering			
V	Computer Science and Engineering			
VI	Information Technology			

2.0 Eligibility for Admission

- Admission to the UGP shall be made either on the basis of the merit rank obtained by the qualifying candidate at an Entrance Test conducted by the Telangana State Government (EAMCET) OR on the basis of any other order of merit approved by the State Council of Higher Education, subject to reservations as prescribed by the Government from time to time.
- 2.2 The medium of instructions for the entire UGP will be in ENGLISH only.

3.0 B.Tech. Programme (UGP) Structure

- 3.1 A student after securing admission shall complete the B. Tech. programme in a minimum period of **four** academic years (8 semesters), and a maximum period of **eight** academic years (16 semesters) starting from the date of commencement of first year first semester, failing which student shall forfeit seat in B. Tech course. Each student shall secure 160 credits (with $CGPA \ge 5$) required for the completion of the under graduate 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, which are as listed below.

3.2.1 **Semester Scheme:**

Each under graduate programme is of 4 academic years (8 semesters) with the academic year divided into two semesters of 22 weeks (\geq 90 instructional days) each, each semester having - 'Continuous Internal Evaluation (CIE)' and 'Semester End Examination (SEE)' under Choice Based Credit System (CBCS) and Credit Based Semester System (CBSS) indicated by UGC, and curriculum/course structure as suggested by AICTE are followed.

3.2.2 Credit Courses:

All Subjects/Courses are to be registered by a student in a semester to earn credits. Credits shall be assigned to each Subject/Course in a L: T: P: C (Lecture Periods: Tutorial Periods: Practical Periods: Credits) Structure, based on the following general pattern.

1 Hr. Lecture (L) per week	1 credit
1 Hr. Tutorial (T) per week	1 credit
1 Hr. Practical (P) per week 2 Hours Practical(Lab)/week	0.5 credits 1 credit

Courses like Environmental Science, Constitution of India, Induction training, Indian Constitution, Essence of Indian Traditional Knowledge, Intellectual Property Rights, and Gender Sensitization lab are mandatory courses. These courses will not carry any credits.

3.2.3 **Subject/ Course Classification:**

All Subjects/ Courses offered for the UGP are broadly classified as: (a) Foundation Courses (FnC), (b) Core Courses (CoC), and (c) Elective Courses (E&C).

- Foundation Courses (FnC) are further categorized as:
- (i) HS (Humanities and Social Sciences), (ii) BS (Basic Sciences), and (iii) ES (Engineering Sciences);
- -Core Courses (CoC) and Elective Courses (E ℓ C) are categorized as PS (Professional Subjects), which are further subdivided as (i) PC (Professional/ Departmental Core) Subjects, (ii) PE (Professional/ Departmental Electives) , (iii) OE (Open Electives); and (iv) Project Works (PW);

Minor Courses: (1 or 2 credit courses as subset of HS)

Mandatory courses: Non credit courses

3.2.4 Course Nomenclature:

The Curriculum Nomenclature or Course-Structure Grouping for the each of the UGP E&T (B.Tech. Degree Programmes), is as listed below (along with AICTE specified % Range of Total Credits)..

	Broad Course	Common Crosses / Cotogores	Corres Description
S.No.	Classification	Course Group/ Category	Course Description

1)		BS-Basic Sciences	Includes – Mathematics, Physics and Chemistry Subjects			
2)		ES-Engineering Sciences	Includes fundamental engineering subjects			
3)	Foundation Courses (FnC)	HS- Humanities and Social Sciences	Includes Subjects related to Humanities, Social Sciences and Management			
4)		PC- Professional Core	Includes Core subjects related to the parents Discipline/ Department/ Branch of Engg.			
5)		PE- Professional Electives	Includes Elective subjects related to the Parent Discipline / Department/ Branch of Engg.			
6)		OE- Open Electives	Electives subjects which include inter-disciplinary subjects or subjects in an area outside the Parent Discipline/ Department/ Branch of Engg.			
7)		Project Work	B.Tech Project or UG Project or UG Major Project			
8)	Professional Subjects	Industrial Training/ Mini – Project	Industrial Training/ Internship/ UG Mini-Project / Mini-Project			
9)	Subjects	Seminar	Seminar/ Colloquium based on core contents related to Parent Discipline/ Department/ Branch of Engg.			
10)	Minor Courses		1 or 2 Credits Courses (subset of HS)			
11)	Mandatory Courses		Mandatory Courses : non-Credit or zero credit courses			
		Total Credits for UGP (B.Te	ech.) Programme			

#Minor variation is allowed as per need of the respective disciplines.

4.0 Course Work

- 4.1 A student, after securing admission, shall pursue the B.Tech. UGP in a minimum period of 4 Academic years, and a maximum period of 8 Academic years (starting from the Date of Commencement of I Year).
- 4.2 Each student shall Register for and Secure the specified number of Credits required for the completion of the UGP and Award of the B.Tech. Degree in respective Branch of Engineering.
- 4.3 Each Semester is structured to provide typically varying between 18 and 22 Credits, totaling to 160 Credits for the entire UG Programme.
- 5.0 Course Registration

- 5.1 A 'Faculty Advisor or Counselor' shall be assigned to each student, who will advise him/her about the UGP, its course structure and curriculum, choice/option for subjects/ courses, based on his competence, progress, pre-requisites and interest.
- 5.2 Academic Section of the College invites 'Registration Forms' from students priority (before the beginning of the Semester), through 'ON-LINE SUBMISSIONS' or Hard Copy Submission, ensuring 'DATE and TIME Stamping' the ON-LINE or Hard Copy Registration Requests for any 'CURRENT SEMESTER' shall be completed BEFORE the commencement of SEEs (Semester End Examinations) of the 'PRECEDING SEMESTER'.
- 5.3 A Student can apply for ON-LINE or Hard Copy Registration, only after obtaining the 'written approval' from this Faculty Advisor, which should be submitted to the college Academics Section through the Head of Department (a copy of the same being retained with Head of Department, Faculty Advisor and the student).
- A student may be permitted to register for all the subjects/ courses in a semester as specified in the course structure with additional subject(s)/course(s) limited a maximum of 4 credits, based on **progress** and SGPA/ CGPA, and subject to completion of the '**pre-requisites**' as indicated for various subjects/ courses, in the department course structure and syllabus contents.
- 5.5 Choice for 'additional subjects/ courses' must be clearly indicated at the registration which needs the specific approval and signature of the faculty advisor/ counselor.
- 5.6 If the Students submit ambiguous choices or multiple options or erroneous entries during ON-LINE or Hard Copy Registration for the Subject(s)/ Course(s) under a give/ specified Course Group/ Category as listed in the Course in that Category only the first mentioned subject/Course in that Category will be taken into consideration.
- 5.7 Subject/ Course Options exercised through ON-LINE or Hard Copy Registration are final and CAN NOT be changed or CAN NOT be inter-changed; further, alternate choices will also not be considered. However, if the Subject/ Course that has already been listed for Registration (by the Head of Department) in a Semester could not be offered due to any unforeseen or unexpected reasons, then the Student shall be allowed to have alternate choice either for a new Subject (subject to offering of such a Subject), or for another existing Subject (subject to availability of seats), which may be considered. Such alternate arrangements will be made by the Head of Department, with due notification and time-framed schedule, within the WEEK from the commencement of Class-work for that Semester.
- 5.8 Dropping of subjects/ courses may be permitted, only after obtaining prior approval from the faculty advisor/ counselor 'within a period of 15 days' from the beginning of the current semester.
- 5.9 **Open electives**: The students have to choose three open electives (OE-I, II & III) from the list of open electives given. However, the student cannot opt for an open elective subject offered by his own (parent) department, if it is already listed under any category of the subjects offered by parent department in any semester.
- 5.10 **Professional electives**: The students have to choose six professional electives (PE-I to VI) from the list of professional electives given.

6.0 Subjects / Courses to be offered

- **6.1** A typical Section (or Class) Strength for each Semester shall be 60.
- 6.2 A subject/Course may be offered to the Students, ONLY IF a Minimum of 20 Students (1/3 of the Section Strength) opt for the same. The Maximum Strength of a Section is limited to 80 (60 + 1/3 of the Section Strength).
- 6.3 More than ONE TEACHER may offer the SAME SUBJECT (Lab./ Practical may be included with the corresponding Theory Subject in the same Semester) in any Semester. However, selection of choice for students will be based on 'FIRST COME FIRST SERVE' Basis and CGPA Criterion' (i.e., the first focus shall be on early ON-line ENTRY from the students for Registration in that Semester, and the second focus, if needed, will be on CGPA of the student).
- 6.4 If more entries for Registration of a Subject, then the concerned Head of Department shall take necessary action, whether to offer such a Subject/Course for TWO (or multiple) SECTIONS or NOT subject to fulfilling the clause 6.2.
- 6.5 In case of options coming from Students of other Departments/ Branches/ Disciplines (not considering OPEN ELECTIVES), PRIORITY shall be given to the student of the 'Parent Department' first.

7.0 Attendance Requirements

A student shall be eligible to appear for the semester end examinations, if the student acquires a minimum of 75% of attendance in aggregate of all the subjects/ courses (excluding attendance in mandatory courses like Environmental Science, Constitution of India, Induction training, Indian Constitution, Essence of Indian Traditional Knowledge, Intellectual Property Rights, and Gender Sensitization lab) for that semester. Two periods of attendance for each theory subject shall be considered, if the student appears for the mid-term examination of that subject. This attendance should also be included in the fortnightly attendance sent to the examination branch.

The attendance of Mandatory Non-Credit courses should be noted and sent to the Examination Branch.

- 7.2 Condoning of shortage of attendance in aggregate up to 10% (65% and above, and below 75%) in each Semester may be granted by the College Academic Committee on genuine and valid grounds, based on the student's representation with supporting evidence.
- 7.3 A stipulated fee shall be payable towards condoning of shortage of attendance.
- 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 End Examinations of that Semester, they get detained and their registration for that Semester shall stand cancelled. They will not be promoted to the next Semester. They may seek re-registration for all those subjects registered in that Semester in which he got detained, by seeking re-admission for that Semester as and when offered; in case if there are any

Professional Electives and/ or Open Electives, the same may also be re-registered if offered, however, if those Elective are not offered in later Semesters, then alternate Electives may be chosen from the SAME set of the Elective Subjects offered under that Category subject to fulfilling the prerequisites.

8.0 Academic Requirements

The following Academic Requirements have to be satisfied, in addition to the Attendance Requirements mentioned in Clause No.7.

- A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course, if student secures not less than 35% marks (25 out of 70 marks) in the semester end examination, and a minimum of 40% of 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 subject/ course.
- 8.2 A student shall be deemed to have satisfied the Academic Requirements and earned the Credits allotted to Industry oriented Mini-Project/ Seminar, if he secures not less than 40% of the total marks (i.e., 40 out of 100 allotted marks) to be awarded for each. The student would be treated as failed. If he (i) does not submit a report on this industry oriented Mini-Project, or does not make a presentation of the same before the Evaluation Committee as per schedule, or (ii) does not present the Seminar as required in the IV year II Semester, or (iii) secures less than 40% of marks (40 marks) in Industry oriented Mini-Project/ Seminar evaluations.

He may reappear once for each of the above evaluations, when they are scheduled again; if he fails in such 'one reappearance' evaluation also, he has to reappear for the same in the next subsequent Semester, as and when it is scheduled.

- A Student will not be promoted from I Year to II Year unless he fulfills the Attendance and Academic Requirements and secure **at least 19 credits out of 38 credits** i.e., 50% of Credits in I Year, from all the relevant regular and supplementary examinations, whether he takes those examinations or not.
- 8.4 A Student will not be promoted from II Year to III Year, unless he fulfills the Attendance and Academic Requirements and secure at least **48 credits out of 80 credits** i.e., 60% of total Credits prescribed from first and second years in all the relevant regular and supplementary examinations, whether he takes those examinations or not.
- A Student will not be promoted from III Year to IV Year, unless he fulfills the Attendance and Academics Requirements and secure at least **73 credits out of 122 credits** i.e., 60% of total Credits prescribed from first, second and third years in all the relevant regular and supplementary examinations, whether he takes those examinations or not
- 8.6 A student (i) shall register for all courses/subjects covering 160 credits as specified and listed in the course structure, (ii) fulfills all the attendance and academic requirements for 160 credits, (iii) earn all 160 credits by securing SGPA ≥ 5.0 (in each semester), and CGPA (at the end of each successive semester) ≥ 5.0, (iv) **Passes all the mandatory courses,** to successfully complete the under graduate programme. The performance of the student in these 160 credits shall be taken into account for the calculation of 'the final CGPA (at the end of under

graduate programme), and shall be indicated in the grade card of IV year II semester.

- 8.7 If a Student registers for some more 'extra Subjects' (in the parent Department or other Departments/ Branches of Engineering) other than those listed Subjects totaling to 160 Credits as specified in the Course Structure of his/her Department, the performances in those 'extra subjects' (although evaluated and graded using the same procedure as that of the required 160 Credits) will not be taken into account while calculating the SGPA and CGPA. For such 'extra Subjects' registered, % marks and Letter Grade alone will be indicated in the Grade Card, as a performance measure, subject to completion of the Attendance and Academic Requirements as stated in clause numbers 7 and 8 above.
- 8.8 Students who fail to earn 160 Credits as per the Course Structure, and as indicated above, within 8 Academic Years from the Date of Commencement of their I Year shall forfeit their seats in B. Tech programme and their admissions shall stand cancelled.
- When a student is **detained in a semester due to shortage of attendance may be re-admitted**when the same semester is offered in the next academic year for fulfillment of academic requirements. The academic regulations under which student has been readmitted shall be applicable. However, no grade allotments or SGPA/ CGPA calculations will be done for the entire semester in which student has been detained.
- 8.10 A student is detained due to lack of credits shall be promoted to the next academic year only after acquiring the required academic credits. The academic regulations under which the student has been readmitted shall be applicable to him.
- 8.11 A student is eligible to appear in the End Semester Examination in any Subject/ Course, but absent at it or failed (thereby falling to secure C Grade or above), may reappear for that subject/course at the supplementary examination (SEE) as and when conducted. In such cases, his Internal Marks (CIE) assessed earlier for that Subject/Course will be carried over, and added to the Marks to be obtained in the SEE supplementary examination, for evaluating his performance in that Subjects.

9.0 Admissions with advance standing

These may arise in the following cases:

- 1) When a student seeks transfer from other colleges to GNITC and desires to pursue study at GNITC in an eligible branch of study.
- 2) When a student after long discontinuity rejoins the college to complete his/her programme of study for the award of a degree.

These admissions may be permitted by the Academic Council of GNITC as per the norms stipulated by the statutory bodies and the Government of Telangana. In all such cases for admission, when needed, permissions from the statutory bodies are to be obtained and the programme of study at GNITC will be governed by the transitory regulations given in section 16.0 of academic regulations approved with effect from academic year 2018-19 onwards.

10.0 Evaluation-Distribution and Weightage of Marks

- 10.1 The performance of a student in each Semester shall be evaluated (irrespective of Credits assigned) subject-wise with a maximum of 100 marks for Theory or Practical or Seminar or Drawing/Design or Industry oriented Mini-Project or Minor Course, etc; however, the B. Tech Project work (Major Project) will be evaluated for 200 Marks. These evaluations shall be based on 30% CIE (Continuous Internal Evaluation) and 70% SEE (semester End Examination), and a Letter grade corresponding to the % marks obtained shall be given.
- 10.2 a) For Theory Subjects (inclusive of Minor Courses), during the Semester, there shall be 2 midterm examinations for 25 marks each. Further, there will be an allocation of 5 marks for Assignment (as specified by the subject teacher concerned). **Therefore each mid-term examination shall be for 30 marks.**

The mid Examination Question paper consists of two parts - a) Part A - subjective paper for 15 marks and, plus b) Part B - objective paper for 10 marks, duration is for 90 minutes.

Part A (Subjective Paper) consists of 3 long questions with internal choice. Total marks of Part A = 15 @ 5 marks for one full question. Each question may carry one or two sub questions. 3rd question may be a full question from part of 3rd Unit or one sub question from 3rd unit and one sub question from any one of the other unit.

Part B (Objective paper) consists of 10 multiple choice questions & 10 fill in the blanks summing up to 20 questions and evaluated for 10 marks i.e. @0.5 marks per question.

- b) The first mid-term examination shall be conducted from the units 1, 2 and part of unit 3 of the syllabus, and the second mid-term examination shall be conducted from the units remaining part of 3, units 4 and 5 of the syllabus.
- c) The first assignment should be submitted before the conduct of the first mid-term examination and the second assignment should be submitted before the conduct of the second mid-term examination.
- d) 1. No Weightage for Attendance.
 - 2. Mid-Exams marks have been changed from 20 marks to 25 marks.
 - 3. Assignment for 5 marks.
 - 4. Total Mid marks = 30 Marks.

The first mid-term examination Marks and first Assignment Marks shall make one set of CIE Marks, and the second mid-term examination Marks together with second Assignment Marks shall make second set of CIE Marks and the average Marks of two sets of mid-marks shall be taken as the Marks secured out of 30 Marks by the Student towards Mid examination marks. This will be the final Internal Mid Examination marks.

- **e**) One objective type special Mid Test shall be conducted to those students who fail to appear in one or both internal mid examination in any subject. Students should register for the special Mid test against the notification. The test procedure and guidelines will be given along with notification.
- 10.2.1 The end semester examinations will be conducted for 70 marks consisting of two parts viz. i) **Part A** for 20 marks, ii) **Part B** for 50 marks.

Part-A is a compulsory question consisting of ten sub-questions. All questions carry equal marks

- Part-B consists of five full questions with internal Choice from five units carrying 10 marks each. Each question is from one unit and may contain sub-questions.
- 10.2.2 For subjects like **Engineering Graphics/Engineering Drawing** there shall be five full questions with internal choice from five units in the semester end examination. Each question is from one unit and may contain sub questions; the student shall answer 5 questions an each question carries 14 marks. There shall be no Part-A and Part-B system.
- 10.2.3 For subjects like **Machine Drawing Practice/Machine Drawing**, SEE will be conducted for 70 marks consisting of two parts viz. (i) Part A for 30 marks, the student shall answer 2 questions with internal choice, selected from unit I and II. Each question carries 15 marks, (ii) Part B for 40 marks. Two questions are from unit III only, The student shall answer one question only. **Part B is compulsory**
- 10.2.4 For the Subject **Estimation, Costing and Project Management**, The SEE paper should consist of Part A, Part B and Part C. i) Part A:- 1 out of 2 questions from unit 1 for 25 marks. Ii) Part B- 1 out of 2 questions from unit-2 for 15 marks. iii) Part- C 3 questions with internal choice from Unit III, IV and V for 30 marks.
- 10.3 For Practical Subjects, there shall be a Continuous Internal Evaluation (CIE) during the Semester for 30 internal marks, and 70 marks are assigned for Lab. / Practical End Semester Examination (SEE). Out of the 30 marks for internals, day-to-day work in the laboratory shall be evaluated for 10 marks towards lab report, 20 marks for conduct of one internal practical examination before II mid term examinations (experiments, results and viva voce) conducted by the laboratory teacher concerned. The semester end examination shall be conducted with an external examiner and the laboratory teacher. The external examiner shall be appointed from the reputed colleges which will be decided by the Examination Branch.
- 10.4 For the Subjects having Design and/or Drawing, (such as Engineering Graphics, Engineering Drawing, Machine Drawing, Production Drawing Practice, and Estimation), the distribution shall be 30 marks for CIE (15 marks for day-to-day work, 15 marks for mid-term tests) and 70 marks for SEE. There shall be two internal tests in a semester and the average of two mid-term tests shall be considered for the award of marks for internal tests.
- 10.5 a) There shall be an industry oriented Mini-project (Project stage-I) / Summer Internship, in collaboration with an Industry of the relevant specialization, to be registered immediately after III Year II Semester examinations, and taken up during the summer vacation .
 - b) The Industry oriented Mini-Project (Project stage-I)/Summer Internship shall be submitted in a report form and a presentation of the same shall be made before a Committee, which evaluates it for 100 marks. The Committee shall consist of Head of the Department, the supervisor of Mini-Project (Project stage-I)/Summer Internship, and a senior faculty Member of the Department. There shall be no internal marks for Industry oriented Mini-project (Project stage-I)/Summer Internship. The Mini-Project shall be evaluated in the IV Year I Semester.
- 10.6 There shall be a Seminar Presentation in IV Year I Semester. For the Seminar, the student shall collect the information on a specialized topic, prepare a Technical Report and submit to the Department at the time of Seminar Presentation. The seminar Presentation (along with the Technical Report) shall be evaluated by a department committee consisting of head of the department, Seminar supervisor and one senior faculty assigned by Head of the Department, for 100 marks. There shall be no SEE or Seminar & Technical Report.

- 10.7 Each Student shall start the Main Project work (Project Stage-II) during the IV Year II Semester, as per the instructions of the Project Guide/Project supervisor assigned by the Head of Department. Out of total 200 marks allotted for the Project work, 70% of marks for the SEE (End Semester Viva-Voice Examination). The project Viva voice shall be conducted by a committee comprising of an External Examiner, Head of the Department and Project supervisor. Out of 60 marks allocated for CIE, 30 marks shall be awarded by the Projects Supervisor (based on the continuous evaluation of the students performance throughout the Project Work period), and the other 30 marks shall be awarded by a Department and Project Supervisor, based on the work carried out and the presentation made by the Student at the time of Viva-voice Examination.
- 10.8 For mandatory courses like Environmental Science, Constitution of India, Intellectual Property Rights, and Gender Sensitization lab etc. will be having semester end examination question along with other examinations. The question paper setting and evaluation will be done by the internal faculty. The question paper pattern for internal and external will be similar to other theory papers.
- 10.9 Grade and Grade points will be allotted to these zero credit mandatory along with pass/fail.

 These grade points shall not be considered for SGPA and CGPA calculations

11.0 Grading Procedure

- 11.1 Grades will be awarded to indicate the performance of each student in each Theory Subject, or Lab/ Practical, or Seminar, or Project, or Mini-Project, Minor Course etc., based on the % marks obtained in CIE+SEE (Continuous Internal Evaluation + Semester End Examination, both taken together) as specified in Item 10 above, and a Corresponding Letter Grade shall be given
- 11.2 As a measure of the student's performance, a 10-point Absolute Grading System using the following Letter Grades (as per UGC/ AiCTE Guidelines) and Corresponding percentage of marks shall be followed

% of Marks Secured (Class Intervals)	Letter Grade (UGC Guidelines)	Grade Points
90% and Above (≥ 90%, ≤ 100%)	O (Out standing)	10
Below 90% but not less than 80% (\geq 80%,< 90%)	A ⁺ (Excellent)	9
Below 80% but not less than 70% (≥70%, < 80%)	A (Very Good)	
Below 70% but not less than 60% (≥60%, < 70%)	B ⁺ (Good)	7
Below 60% but not less than 50% (≥50%, < 60%)	B (Average)	
Below 50% but not less than 40% (≥40%, < 50%)	C (Pass)	5
Below 40% (< 40%)	F (Fail)	0
Absent	Ab	0

11.3 A student obtaining F Grade in any Subject shall be considered 'failed' and will be required to reappear as 'Supplementary Candidate' in the End Semester Examination (SEE), as and when offered. In such cases, his Internal Marks (CIE Marks) in that Subject (s) will remain same as those he obtained earlier.

- 11.4 To a student who has not appeared for an examination in any subject, 'Ab' grade will be allocated in that subject, and he is deemed to have 'failed'. A student will be required to reappear as a 'supplementary student' in the semester end examination, as and when offered next. In this case also, the internal marks in those subjects will remain the same as those obtained earlier.
- 11.5 A letter grade does not indicate any specific percentage of marks secured by the student, but it indicates only the range of percentage of marks.
- 11.6 In general, a student shall not be permitted to repeat any Subject/Course (s) only for the sake of 'Grade Improvement' or 'SGPA / CGPA Improvement'. However, he has to repeat all the Subjects /Courses pertaining to that Semester, when he is detained.
- 11.7 A Student earns Grade Point (GP) in each Subject/Course, on the basis of the Letter Grade obtained by him in that subject/Course (excluding Mandatory non-credit Courses). Then the corresponding 'Credits Points' (CP) are computed by multiplying the Grade Point with Credits for that particular Subject/Course.

- 11.8 The Student passes the Subject/ Course only when he gets $GP \ge 5$ (C Grade or above).
- 11.9 The Semester Grade Point Average (SGPA) is calculated by dividing the Sum of Credit Points (Σ CP) secured from ALL Subjects/ Courses registered in a Semester, by the Total Number of Credits registered during that Semester. SGPA is rounded off to TWO Decimal Places. SGPA is thus computed as

SGPA =
$$\left\{\sum_{i=1}^{N} C_{i} G_{i}\right\} / \left\{\sum_{i=1}^{N} C_{i}\right\} \dots$$
 For each Semester,

Where 'i' is the subject indicator index (takes into account all Subjects in a semester), 'N' is the no. of Subjects 'REGISTERED' for the semester (as specifically required and listed under the course Structure of the parent Department), Ci s the no. of Credits allotted to the ith subject, and G_i represents the Grade Points (GP) corresponding to the Letter Grade awarded for that ith subject.

11.10 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 in **all** registered courses in **all** semesters, and the total number of credits registered in **all** the semesters. CGPA is rounded off to **two** decimal places. CGPA is thus computed from the I year II semester onwards at the end of each semester as per the formula

CGPA =
$$\{\sum_{j=1}^{M} C_j G_j\}/\{\sum_{j=1}^{M} C_j\}$$
 ... for all S Semesters registered (ie., upto and inclusive of S Semesters, $S \ge 2$),

where 'M' is the **total** no. of subjects (as specifically required and listed under the course structure of the parent department) the student has '**registered**' i.e., from the 1^{st} semester onwards up to and inclusive of the 8^{th} semester, 'j' is the subject indicator index (takes into account all subjects from 1 to 8 semesters), C is the no. of credits allotted to the jth subject, and G represents the grade points (GP) corresponding to the letter grade awarded for that jth subject.

- After registration and completion of I year I semester, the SGPA of that semester itself may be taken as the CGPA, as there are no cumulative effects.
- 11.11 For Merit Ranking or Comparison Purposes or any other listing, ONLY the 'ROUNDED OFF' values of the CGPAs will be used.
- 11.12 For Calculations listed in Item 10.6 10.10, performance in failed Subjects/Courses (securing F Grade) will also be taken into account, and the Credits of such Subjects/ Courses will also be included in the multiplications and summations. However, Mandatory Courses will not be taken into consideration.
- 11.13 SGPA and CGPA of a semester will be mentioned in the semester Memorandum of Grades if all subjects of that semester are passed in first attempt. Otherwise the SGPA and CGPA shall be mentioned only on the Memorandum of Grades in which sitting he passed his last exam in that semester.

12.0 Passing Standards:

- 12.1 A student shall be declared successful or 'passed' in a semester, if student secures a $GP \ge 5$ ('C' grade or above) in every subject/course in that semester (i.e. when student gets an $SGPA \ge 5.00$ at the end of that particular semester); and a student shall be declared successful or 'passed' in the entire under graduate programme, only when gets a $CGPA \ge 5.00$ for the award of the degree as required.
- 12.2 In spite of securing C Grade or above in some (or all) Subjects/ Courses in any Semester, if a Student receives a SGPA < 5.00 and/ or CGPA < 5.00 at the end of such a Semester, then he 'may be allowed' (on the 'specific recommendations' of the Head of the Department and subsequent approval from the Principal)
 - (i) to go into the next subsequent Semester (subject to fulfilling all other attendance and academic requirements as listed under Items 7 to 8);
 - (ii) to 'improve his SGPA of such a Semester (and hence CGPA) to 5.00 or above', by reappearing for ONE or MORE (as per Student's choice) of the same Subject(s) / Course(s) in which he has secured P Grade(s) in that Semester, at the Supplementary Examination to be held in the next subsequent semester(s). In such cases, his Internal marks (CIE Marks) in those Subject(s) will remain same as those he obtained earlier.
 - In these considerations, the newly secured Letter Grades will be recorded and taken into account for calculation of SGPA and CGPA, only if there is an improvement.
- 12.3 After the completion of each Semester, a Grade Card or Grade Sheet (or Transcript) shall be issued to all the Registered Students of that Semester, indicating the Letter Grades and Credits earned. It will show the details of the Courses Registered (Course Code, Title, No. of Credits, Grade Earned etc.), Credits earned, SGPA and CGPA.

13.0 Declaration of Results

13.1 Computation of SGPA and CGPA are done using the procedure listed in 11.7 to 11.11.

13.2 For Final % of marks equivalent to the computed final CGPA, the following formula may be used..

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

14.0 Award of Degree

- 14.1 A student who registers for all the specified Subjects/ Courses as listed in the Course Structure, satisfies all the course Requirements, and passes all the examinations prescribed in the entire UG E&T Programme (UGP), and secures the required number of 160 Credits (with CGPA ≥ 5.0), within 8 Academics years from the Date of Commencement of the First Academics Year, shall be declared to have 'QUALIFIED' for the Award of the B.Tech Degree in the chosen Branch of Engineering as selected at the time of Admission.
- 14.2 A Student who qualifies for the award of the degree as listed in Item 14.1 shall be placed in the following Classes.
- 14.3 Students with final CGPA (at the end of the UGP) \geq 8.00, shall be placed in Distinction with first class.
- 14.4 Students with final CGPA (at the end of the UGP) \geq 6.50 but < 8.00, shall be placed in 'FIRST CLASS'
- 14.5 Students with final CGPA (at the end of the UGP) \geq 5.50 but < 6.50, shall be placed in 'SECOND CLASS'
- 14.6 All other Students who qualify for the Award of the Degree (as per Item 12.1), with final CGPA (at the end of the UGP) \geq 5.00 but \leq 5.50, shall be placed in 'PASS CLASS'.
- 14.7 A student with final CGPA (at the end of the UGP) < 5.00 will not be eligible for the Award of the Degree.

15.0 Withholding of Results

15.1 If the student has not paid fees to University / College at any stage, or has pending dues against his name due to any reason whatsoever, or if any case of indiscipline is pending against him, the result of the student may be withheld, and he will not allowed to go into the next higher Semester. The Award or issue of the Degree may also be withheld in such cases.

16.0 In case of admissions with advance standing:

Transitory Regulations

For students admitted under advance standing (mentioned in 9.0) these transitory regulations will provide the modus operandi. At the time of such admission, based on the programme pursued (case by case) such as:

- 1) Equivalent courses completed by the student will be established by the BOS concerned.
- 2) Marks/ Credits are transferred for all such equivalent courses and treated as successfully cleared in the programme of study prescribed by GNITC. Accordingly equivalent grades

will be provided as per GNITC grading system

- 3) A Programme chart of residual courses not cleared will be delivered and a programme study with concerned semester specified will be prescribed for pursuit at GNITC.
- 4) Marks obtained in the previous system if the case be, are converted to grades and CGPA is calculated.
- 5) NOC for the students seeking transfer to GNITC will be issued by the Chairman, Academic Council based on the recommendations of the concerned BOS Chairman/Chairmen.

All other modalities and regulations governing shall be the same as those applicable to the stream of students with whom such a candidate is merged.

17.0 For students detained due to shortage of attendance:

A Student who has been detained in I year of JNTUH -R09/R13/R15 Regulations or GNITC – R16 /R18 due to lack of attendance, shall be permitted to join I year I Semester of GNITC-R21 Regulations and he is required to complete the study of B. Tech. programme within the **stipulated period of eight academic years from the date of first admission in I Year.**

A student who has been detained in any semester of II, III and IV years of JNTUH - R09/R13/R15 Regulations or GNITC – R16/R18 for want of attendance, shall be permitted to join the corresponding semester of GNITC-R21 regulations and is required to complete the study of B. Tech. within the stipulated period of eight academic years from the date of first admission in I Year. The GNITC-R21 Academic Regulations under which a student has been readmitted shall be applicable to that student from that semester.

The maximum credits that a student acquires for the award of degree, shall be the sum of the total number of credits secured in all the regulations of his/her study including GNITC-R21 Regulations. The performance evaluation of the student will be done after the exemption of two subjects if total credits acquired are ≤ 192 subject to a minimum of 160, three subjects if total credits acquired are > 192 (see R16/R18 Regulations for exemption details).

If a student readmitted to GNITC-R21 Regulations, has any subject with 80% of syllabus common with his/her previous regulations, that particular subject in R21 Regulations will be substituted by another subject to be suggested by the Academic Council/ University.

Note: If a student readmitted to GNITC-R21 Regulations, has not studied any subjects/topics in his/her earlier regulations of study which is prerequisite for further subjects in R21 Regulations, the College Principals concerned shall conduct remedial classes to cover those subjects/topics for the benefit of the students.

See rule (16.0) for further Transitory Regulations

18.0 For students detained due to shortage of credits:

A student of JNTUH -R09/R13/R15 or GNITC – R16/R18 Regulations, who has been detained due to lack of credits, shall be promoted to the next semester of GNITC-R21 Regulations only after acquiring the required credits as per the corresponding regulations of his/her first admission. The student is required to complete the study of B. Tech. within the stipulated period of eight academic years from the year of first admission. The R21 Academic Regulations are applicable to a student from the year of readmission onwards.

18.1 A student who has failed in any subject under any regulation has to pass those subjects in the same regulations.

The maximum credits that a student acquires for the award of degree, shall be the sum of the total number of credits secured in all the regulations of his/her study including R21 Regulations. The performance evaluation of the student will be done after the exemption of two subjects if total credits acquired are \leq 192 subject to a minimum of 160, three subjects if total credits acquired are > 192 (see R21 Regulations for exemption details).

If a student readmitted to R21 Regulations, has any subject with 80% of syllabus common with his/her previous regulations, that particular subject in R21 Regulations will be substituted by another subject to be suggested by the BOS/ Academic Council/ University.

Note: If a student readmitted to R21 Regulations, has not studied any subjects/topics in his/her earlier regulations of study which is prerequisite for further subjects in R21 Regulations, the College Principals concerned shall conduct remedial classes to cover those subjects/topics for the benefit of the students

See rule (16.0) for further Transitory Regulations

19.0 For readmitted students in R21 Regulations:

A student who has failed in any subject under any regulation has to pass those subjects in the same regulations.

The maximum credits that a student acquires for the award of degree, shall be the sum of the total number of credits secured in all the regulations of his/her study including R21 Regulations. The performance evaluation of the student will be done after the exemption of two subjects if total credits acquired are ≤ 192 subject to a minimum of 160 credits, three subjects if total credits acquired are ≥ 192 (see R16/R18 Regulations for exemption details).

If a student readmitted to R21 Regulations, has any subject with 80% of syllabus common with his/her previous regulations, that particular subject in R21 Regulations will be substituted by another subject to be suggested by the BOS/ Academic Council/ University.

Note: If a student readmitted to R21 Regulations, has not studied any subjects/topics in his/her earlier regulations of study which is prerequisite for further subjects in R21 Regulations, the College Principals concerned shall conduct remedial classes to cover those subjects/topics for the benefit of the students.

20.0 Student Transfers

- 20.1 There shall be **no branch transfers after the completion of Admission Process**.
- 20.2 The students seeking transfer to colleges affiliated to **JNTUH** from various other Universities/institutions have to pass the failed subjects which are equivalent to the subjects of

GNITC, and also pass the subjects of GNITC which the students have not studied at the earlier institution. Further, though the students have passed some of the subjects at the earlier institutions, if the same subjects are prescribed in different semesters of GNITC, the students have to study those subjects in GNITC in spite of the fact that those subjects are repeated.

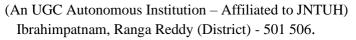
20.3 The transferred students from other Universities/institutions to GNITC who are on rolls to be provide one chance to write the Special Mid Term (internal marks) in the **failed subjects** and/or subjects not studied as per the clearance letter issued by the university.

21.0 Scope

- (i) Where the words "he", "him", "his", occur in the write-up of regulations, they include "she", "her", "hers".
- (ii) Where the words "Subject" or "Subjects", occur in these regulations, they also imply "Course" or "Courses".
- (iii) The Academic Regulations should be read as a whole, for the purpose of any interpretation.
- (iv) In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal / Director is final.
- (v) The College may change or amend the Academic Regulations, Course Structure or Syllabus at any time, and the changes or amendments made shall be applicable to all Students with effect from the dates notified by the College Authorities.



GURU NANAK INSTITUTIONS TECHNICAL CAMPUS





Academic Regulations for B.Tech. (Lateral Entry Scheme(LES)) from the AY 2022-2023

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

- 1. 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.
- 2. The student shall register for 122 credits and secure 122 credits with CGPA \geq 5 from II year to IV year B. Tech. programme (LES) for the award of B. Tech. degree.
- 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 forfeit their seat in B. Tech.
- 4. The attendance requirements of B. Tech. (Regular) shall be applicable to B. Tech. (LES).

5. Promotion rule

- 5.1 A Student will not be promoted from II Year to III Year, unless he/she fulfills the Attendance and Academic Requirements and secure at least 21 credits out of 42 credits i.e., 50% of total Credits prescribed from first and second years in all the relevant regular and supplementary examinations, whether he takes those examinations or not.
- 5.2 A Student will not be promoted from III Year to IV Year, unless he fulfills the Attendance and Academics Requirements and secure at least 50 credits out of 84 credits i.e., 60% of total Credits prescribed from second and third years in all the relevant regular and supplementary examinations, whether he takes those examinations or not.
- 6. All the other regulations as applicable to B. Tech. 4-year degree course (Regular) will hold good for B. Tech. (Lateral Entry Scheme).





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MALPRACTICES RULES

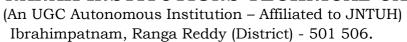
	Nature of Malpractices	Punishment
	If Candidate:	
1(a)	-	Expulsion from the examination hall and cancellation of the performance in that subject only.

	appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)				
1(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate 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 candidates involved. In case of an outsider, he will be handed over to the police and a case id registered against him.			
2	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 candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidates has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examination of the subjects of that Semester/year. The hall ticket of the candidate is to be cancelled.			
3	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of the Semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulation in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and case is registered against him.			
4	Smuggles in the answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examination of the subjects of the semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with			

		forfeiture of seat.
5	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiner or writes to the examiner requesting him to award	Cancellation of the performance in that subject.
	pass marks.	
6	Refuses to obey the orders of the chief superintendent/ Assistant — Superintendent / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organize a walk out or instigates others to walk out, or threatens the officer-in charge or any persons on duty in or outside the examination hall of any injury to his persons 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 persons on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which results in damage to or destruction of properly 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.	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates 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.
7	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 the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examination of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
8	Possess any Lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not

		be permitted for the remaining examination of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.		
9	If student of the college, who is not candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Persons(so who do not belong to the college will be handed over to police and, a police case will be registered against them.		
10	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 the candidate has already appeared including practical examinations and project work shall not be permitted for the remaining examination of the subjects of that semester/year.		
11	Copying detected on the basis of internal evidence, such as, during valuation or during special security.	of Cancellation of the performance in th		
12	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the college/ University for the further action to award suitable punishment.			







COURSE STRUCTURE

B.Tech I Year - R18 Regulations

Common to Civil & Mechanical Engineering

I Year I Semester)

SI. No	Subject Code	Subject	L	Т	Р	Credits
1	18BS0MA01	Mathematics-I	3	1	0	4
2	18BS0PH01	Engineering Physics	3	1	0	4
3	18HS0EN01	English	2	0	0	2
4	18ES0ME01	Engineering Graphics	1	0	4	3
5	18BS0PH02	Engineering Physics Lab	0	0	3	1.5
6	18HS0EN02	English Lab	0	0	2	1
7	18ES0ME03	Engineering Workshop	1	0	4	3
		Total Periods		25		18.5

I Year II Semester

SI.No	Subject Code	Subject	L	Т	Р	Credits
1	18BS0MA02	Mathematics – II	3	1	0	4
2	18BS0CH01	ChemistryP	3	1	0	4
3	18ES0EE01	Basic Electrical Engineering	3	1	0	4
4	18ES0CS01	Programming for Problem Solving	3	0	0	3
5	18BS0CH02	Chemistry Lab	0	0	3	1.5
6	18ES0EE02	Basic Electrical Engineering Lab	0	0	2	1
7	18ES0CS02	Programming for Problem Solving Lab	0	0	4	2

Total Periods	24	19.5





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COURSE STRUCTURE

B.Tech I Year - R18 Regulations

Electronics and Communication Engineering

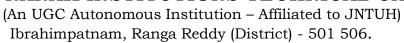
Year I Semester (ECE)

SI. No	Subject Code	Subject	L	Т	Р	Credits
1	18BS0MA01	Mathematics-I	3	1	0	4
2	18BS0PH03	Applied Physics	3	1	0	4
3	18HS0EN01	English	2	0	0	2
4	18ES0ME01	Engineering Graphics	1	0	4	3
5	18BS0PH04	Applied Physics Lab	0	0	3	1.5
6	18HS0EN02	English Lab	0	0	2	1
7	18ES0ME03	Engineering Workshop	1	0	4	3
Total Periods			25			18.5

I Year II Semester (ECE)

SI.No	Subject Code	Subject	L	Т	Р	Credits
1	18BS0MA02	Mathematics – II	3	1	0	4
2	18BS0CH01	Chemistry	3	1	0	4
3	18ES0EE01	Basic Electrical Engineering	3	1	0	4
4	18ES0CS01	Programming for Problem Solving	3	0	0	3
5	18BS0CH02	Chemistry Lab	0	0	3	1.5
6	18ES0EE02	Basic Electrical Engineering Lab	0	0	2	1
7	18ES0CS02	Programming for Problem Solving Lab	0	0	4	2
Total Periods				24		19.5







COURSE STRUCTURE

B.Tech I Year - R18 Regulations

Common to CSE, CSO, CSD, CSM, CSC, IT & EEE

I Year I Semester

SI. No	Subject Code	Subject	L	Т	Р	Credits
1	18BS0MA01	Mathematics-I	3	1	0	4
2	18BS0CH01	Chemistry	3	1	0	4
3	18ES0EE01	Basic Electrical Engineering	3	1	0	4
4	18ES0CS01	Programming for Problem Solving	3	0	0	3
5	18BS0CH02	Chemistry Lab	0	0	3	1.5
6	18ES0EE02	Basic Electrical Engineering Lab	0	0	2	1
7	18ES0CS02	Programming for Problem Solving Lab	0	0	4	2
Total Periods			24			19.5

I Year II Semester

SI.No	Subject Code	Subject	L	т	Р	Credits
1	18BS0MA02	Mathematics – II	3	1	0	4
2	18BS0PH03	Applied Physics	3	1	0	4
3	18HS0EN01	English	2	0	0	2
4	18ES0ME01	Engineering Graphics	1	0	4	3
5	18BS0PH04	Applied Physics Lab	0	0	3	1.5
6	18HS0EN02	English Lab	0	0	2	1
7	18ES0ME03	Engineering Workshop	1	0	4	3
Total Periods 2				25		18.5