



**VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI
INSTITUTE OF ENGINEERING & TECHNOLOGY HYDERABAD
(An Autonomous Institute)**

**ACADEMIC RULES AND REGULATIONS OF FOUR YEAR B.TECH.
REGULAR DEGREE PROGRAMME APPLICABLE FOR THE
STUDENT BATCHES ADMITTED FROM THE ACADEMIC YEAR
2019 – 2020**

1.0 PREAMBLE:

Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology (VNRVJIET) aims at achieving academic excellence by implementing new initiatives in teaching-learning and evaluation processes. Based on the directions of the University Grants Commission (UGC), New Delhi, All India Council for Technical Education (AICTE), New Delhi and Jawaharlal Nehru Technological University (JNTU) Hyderabad, VNRVJIET introduced the Choice Based Credit System (CBCS) in both the under-graduate and post-graduate programmes offered from the academic year 2015 – 2016. Keeping in view of the standardization of the higher education system in India, VNRVJIET is continuing the implementation of CBCS ahead.

2.0 SHORT TITLE, APPLICATION AND COMMENCEMENT:

- These regulations shall be called as the "VNRVJIET B.Tech. Choice Based Credit System (CBCS) Academic Regulations, 2019". In short, it shall be referred as 'VNRVJIET B.Tech. CBCS R19 Regulations'.
- The regulations are quite comprehensive and include definitions of key terms, semester system, credit system, grading system and other relevant details.
- The regulations detailed herein shall apply to all the regular and professional under-graduate programmes offered by the Institute.
- These regulations shall be applicable and come into force to the student batches admitted from the academic year 2019-2020 onwards.
- The Institute may revise, amend or change the regulations, scheme of examinations and syllabi, from time to time, if found necessary and on approval by the Academic Council of the Institute, keeping the recommendations of the BoS in view.
- Any or all such amendments shall be effective from such date and to such batches of students including those already undergoing the programme, as may be approved through Academic Council of the Institute.

3.0 CHOICE BASED CREDIT SYSTEM:

- The Choice Based Credit System (CBCS) enables a student to obtain a degree by accumulating the required number of credits prescribed for that degree. Under the CBCS, the requirement for awarding a degree is prescribed in terms of number of credits to be completed by the students. The number of credits earned by the student reflects the knowledge or skill acquired by him / her.

Each course is assigned with a fixed number of credits based on the contents to be learned. The student also has choice in selecting the courses out of those offered by the various departments. The grade points earned for each of the course reflects the student's proficiency in that course.

- The CBCS provides the student flexibility in duration to complete a programme of study. The CBCS facilitates transfer of credits earned in different departments or institutions of higher education in India.
- The CBCS permits students to:
 1. Choose electives from a wide range of elective courses offered by the departments.
 2. Undergo additional courses of interest.
 3. Adopt an interdisciplinary approach in learning.
 4. Make the best use of expertise of the available faculty.

4.0 ABBREVIATIONS:

| Abbreviation | Full Form |
|--------------|---|
| AAT | Alternative Assessment Tool |
| AC | Academic Council |
| AICTE | All India Council for Technical Education |
| B.Tech. | Bachelor of Technology |
| BIE | Board of Intermediate Education |
| BT | Bloom's Taxonomy |
| BoS | Board of Studies |
| C | Credit |
| CA | Class Assessment |
| CBCS | Choice Based Credit System |
| CGPA | Cumulative Grade Point Average |
| CIE | Continuous Internal Evaluation |
| CO | Course Outcomes |
| CoE | Controller of Examinations |
| CP | Credit Point |
| D | Drawing |
| DoA | Dean of Academics |
| GO | Government Order |
| GP | Grade Point |
| HoD | Head of the Department |
| IAC | Institute Academic Committee |
| JNTUH | Jawaharlal Nehru Technological University Hyderabad |
| L | Lecture |
| LES | Lateral Entry Scheme |
| M.Tech. | Master of Technology |
| MOOC | Massive Open Online Course |
| NBA | National Board of Accreditation |
| NPTEL | National Programme on Technology Enhanced Learning |
| OBE | Outcome Based Education |

| | |
|----------|---|
| P | Practical |
| PG | Post-Graduate |
| Ph.D. | Doctor of Philosophy |
| PO | Programme Outcomes |
| PSO | Programme Specific Outcomes |
| SEE | Semester End Examination |
| SGPA | Semester Grade Point System |
| SWAYAM | Study Webs of Active Learning for Young and Aspiring Minds |
| T | Tutorial |
| UG | Under-Graduate |
| UGC | University Grants Commission |
| VNRVJIET | Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering & Technology |

5.0 NOMENCLATURE:

| S. No. | Keywords | Definition |
|--------|------------------------------|---|
| 1. | Academic Council: | Highest academic body of the Institute and is responsible for the maintenance of standards of instruction, education and examination within the Institute. Academic Council is an authority as per the AICTE / UGC regulations and has the right to take decisions on all academic matters including academic research. |
| 2. | Academic Plan: | A document defining the course contents and complete details of plan of delivery of the course viz. Course title, Course code, Pre-requisite, Credit structure, Team of instructors, Course objectives, Course outcomes, Mapping of course outcomes and programmes outcomes, relevant syllabus, textbook(s) and reference books, Course session plan and delivery plan, evaluation method, course notices and other course related aspects. |
| 3. | Academic Year: | A period that is necessary to complete courses of study. It consists of two consecutive (one odd + one even) semesters. |
| 4. | Admission Procedure: | As prescribed by the Government of Telangana. |
| 5. | Audit Course: | A course of study which has neither evaluation component nor a grade. |
| 6. | Autonomous Institute: | An Institute designated as 'Autonomous' by University Grants Commission (UGC), New Delhi in concurrence with the affiliating University i.e., Jawaharlal Nehru Technological University, Hyderabad and Telangana State Government. |

7. **Backlog Course:** A course is considered to be a backlog course if the student has obtained a Fail (F) grade.
8. **Basic Science Courses:** Courses of foundational nature in the areas of Mathematics, Physics, Chemistry, Biology etc.
9. **Betterment:** Betterment is a way that contributes towards improvement of the students' grade in any course(s). It can be done by either (a) re-appearing or (b) re-registering for the course.
10. **Board of Studies:** An authority, as defined in UGC regulations, constituted by the Principal for each of the department separately. The board is responsible for curriculum design and update in respect of all the programmes offered by a department.
11. **Branch:** A discipline or specialization of a degree programme like Civil Engineering, Mechanical Engineering etc.
12. **Certificate Course:** A course that makes a student gain hands-on expertise and skills required for holistic development. It is a mandatory, non-credited course for the award of degree.
13. **Choice Based Credit System (CBCS):** A system which provides choice for students to select from the prescribed courses.
14. **Compulsory Course:** Course required to be undertaken for the award of the degree as per the programme.
15. **Continuous Internal Evaluation (CIE):** Summative assessments used to evaluate student learning, acquired skills, and academic attainment during a course.
16. **Course:** A course offered for learning in a particular semester by the Institute. These could be theory / laboratory / project work / miniproject / internship etc. and may comprise of lectures / tutorials / practicals / assignments / examination / viva-voce etc. All the courses need not carry the same weightage. A course is defined through course objectives and course outcomes.
17. **Course Outcomes (CO):** Statements describing essential skills that each and every student need to acquire at the end of a course. They can be from 3 to 5 for all the courses.
18. **Course Registration:** Process of enrolling into a set of courses in a semester of the programme.
19. **Credit:** A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one lecture hour of teaching (lecture or tutorial) or two hours of practical / field-work per week.

20. **Credit Based Semester System (CBSS):** A system which prescribes the number of credits to be secured by the student for the requirement of award of degree.
21. **Credit Point:** A product of grade point and number of credits for a course.
22. **Credit Transfer:** The procedure of granting credit(s) to a student for course(s) undertaken online through MOOC.
23. **Cumulative Grade Point Average (CGPA):** A measure of overall cumulative performance of a student over all semesters. It is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.
24. **Curriculum:** Curriculum incorporates all the courses that are offered in a specific discipline. It also indicates the planned interaction of students with instructional content, materials and resources.
25. **Degree:** A student who fulfills all the programme requirements is eligible to receive a degree.
26. **Department:** An academic entity that conducts relevant curricular and co-curricular activities, involving both teaching and non-teaching staff and other resources.
27. **Detention:** Student who does not secure minimum required attendance in AGGREGATE shall be detained OR Student who does not secure minimum credits required for promotion from one year to the next shall be detained.
28. **Dropping of Courses:** A student who doesn't want to register certain courses should do so in writing in a prescribed format within the time frame as mentioned in these regulations.
29. **Engineering Science Courses:** Courses belonging to the basic evolutionary aspects of engineering from Mechanical Engineering, Electrical Engineering, Computer Science etc. like Workshop Practices, Engineering Graphics, Engineering Drawing, Programming through C, Basics of Electrical Energy for Engineers, Engineering Mechanics, etc.
30. **Evaluation:** Evaluation is the process of judging the academic work done by the student in his / her courses. It is done through a combination of continuous internal evaluation and semester end examinations.
31. **Grade Point:** A numerical weight allotted to each letter grade on a 10-point scale.

32. **Grade Sheet:** Based on the grades earned, a grade sheet shall be issued to all the registered students after every semester. The grade sheet shall display the course details (Course code, Course title, number of credits, grade secured) along with SGPA of that semester and CGPA earned till that semester.
33. **Humanities & Social Sciences Courses:** Courses offered in the area of humanities and liberal arts.
34. **Industrial Visit:** Visit to a company / firm as per the academic requirement.
35. **Industry Oriented Mini-Project** A credit-based course that a student has to undergo during a specified semester involving exploration in a discipline belonging to their research interest within their programme of study.
36. **Institute:** VNRVJIET
37. **Internship:** A period of training / work experience offered by an industry / research organization / academic institution for a limited period of time as specified in these regulations.
38. **Laboratory based Course Projects:** A student-centric learning methodology wherein students work as individuals or in teams in a laboratory for design, problem-solving, decision making, and investigative activities.
39. **Letter Grade:** An index of the performance of students in a said course. Grades are denoted by letters like O, A+, A, B+, B, C, F, Ab.
40. **Mandatory Courses:** Compulsory non-credit courses that a student need to study as prescribed in the programme.
41. **Massive Open Online Courses (MOOC):** Open access online courses aimed at providing ways to learn new skills.
42. **Open Elective Courses:** Courses of interdisciplinary nature offered to all the students of various programmes across the Institute.
43. **Outcome Based Education:** An educational theory wherein each part of an educational system is based around goals (outcomes). Each student should have achieved the goal by the end of the educational experience.
44. **Overloading:** Registering for more number of credits than normally prescribed by the programme in a semester.
45. **Pre-requisite:** A course whose knowledge is required for registration into higher level course.
46. **Professional Core Courses:** Courses that are fundamental constituents of the respective engineering discipline.
47. **Professional Elective Courses:** Courses those are discipline-specific.

48. **Programme:** A set of courses offered by the department leading to the award of degree in that programme.
49. **Programme Outcomes (PO):** Statements describing the essential skill sets that each and every student need to possess at the time of graduation. These skill sets based on the graduate attributes as defined by the National Board of Accreditation (NBA) are in the areas of employability, entrepreneurial, social and behavioral aspects. They are 12 in number for a specific programme and are subjected to modification from time to time as defined by the NBA.
50. **Programme Specific Outcomes (PSO):** Statements that describe what the graduates of a specific programme should be able to do. They can be 3 to 5 in number for a specific programme.
51. **Project:** A credit-based course that a student has to undergo, as prescribed in the programme, which involves the student to undertake a research or design that is carefully planned to achieve a particular aim.
52. **Re-appearing:** A student can reappear only in the supplementary semester end examination for the external component of a course, subject to the exam registration and the regulations contained herein.
53. **Regulations:** The rules and regulations contained herein that are common to all the B.Tech. programmes offered by the Institute and designated as "VNRVJIET B.Tech. CBCS R19 Regulations"
54. **Re-registering:** A student desiring to repeat a course is permitted to do so, subject to the regulations contained herein.
55. **Semester:** Each semester shall consist of 16 weeks of academic work excluding examination and evaluation.
56. **Semester End Examination:** An examination conducted at the end of a course of study i.e., after the completion of instruction in a semester.
57. **Semester Grade Point Average:** A measure of performance of work done in a semester. It is ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.
58. **Substitute Courses:** A course that is offered in place of another course that is already studied by the student and is repeated in the semester of study.

59. **Underloading:** Registering for lesser number of credits than normally prescribed by the programme in a semester.
60. **University:** Jawaharlal Nehru Technological University Hyderabad
61. **Virtual Laboratories:** Web enabled experiments for remote operation so as to increase the curiosity and innovation of students and provide hands-on experience.

6.0 UNDER-GRADUATE DEGREE PROGRAMMES ON OFFER:

VNRVJIET offers 4-year (8 semesters) **Bachelor of Technology (B. Tech.)** degree programme, under **Choice Based Credit System (CBCS)**, with effect from the academic year 2019 - 2020 onwards, in the branches as shown in the Table 1.

Table 1 B.Tech. programmes of study on offer

| S. No. | Branch |
|--------|--|
| 1 | Automobile Engineering |
| 2 | Civil Engineering |
| 3 | Computer Science and Business Systems |
| 4 | Computer Science and Engineering |
| 5 | Computer Science and Engineering (Artificial Intelligence and Machine Learning)* |
| 6 | Computer Science and Engineering (Cyber Security)* |
| 7 | Computer Science and Engineering (Data Science)* |
| 9 | Computer Science and Engineering (IoT)* |
| 10 | Electrical and Electronics Engineering |
| 11 | Electronics and Communication Engineering |
| 12 | Electronics and Instrumentation Engineering |
| 13 | Information Technology |
| 14 | Mechanical Engineering |

** Offered from the academic year 2020-2021*

7.0 ELIGIBILITY FOR ADMISSION:

The eligibility criteria for admission into engineering programmes offered at VNRVJIET shall be as prescribed by the Government of Telangana. The criteria are given below:

- The candidate shall be an Indian National / NRI.
- The candidate should have completed 16 years of age as on 31st December of the academic year for which the admissions are being conducted.
- The candidate should have passed the qualifying examination (10+2) or equivalent as on the date of admission recognized by BIE, Telangana State.
- Seats in each programme in the Institute are classified into two categories i.e., **Category – A** and **Category – B** as per the GOs.

- **Category – A Seats**

These seats shall be filled through counseling as per the rank secured by a candidate in the Common Entrance Test (EAMCET) conducted by the Government of Telangana and as per other admission criteria laid down in the GOs.

- **Category – B Seats**

These seats shall be filled by the Institute as per the GOs issued by the Government of Telangana from time to time.

- **Direct Admission to Second Year: (Lateral Entry Scheme)**

A candidate shall be admitted into the third semester (II year I semester) based on the rank secured by the candidate in the Engineering Common Entrance Test [ECET (For Diploma Holders)] by the Government of Telangana and as per other admission criteria laid down in the GOs.

8.0 MEDIUM OF INSTRUCTION:

The medium of instruction shall be **English** for all the courses including their content delivery and examinations, seminars, presentations and project evaluation as prescribed in the programme curriculum.

9.0 B.TECH. PROGRAMME STRUCTURE:

The structure of the B.Tech. programmes on offer at VNRVJIET are based on the **Choice Based Credit System (CBCS)** and **Credit Based Semester System (CBSS)** as defined by the UGC and the curriculum / course structure as suggested by the AICTE in its Model Curriculum.

Semester Scheme:

- The B.Tech. programmes offered at VNRVJIET follow **semester scheme** pattern.
- The duration of a B.Tech. programme shall be of **4 academic years**.
- Each academic year shall have **2 semesters** i.e., odd and even semesters and shall be counted as first semester, second semester, third semester and so on upto eighth semester.
- Each semester shall consist of **16 weeks** of academic work excluding examination and evaluation.
- Each semester is structured to provide credits totaling to **160 credits** for the entire B.Tech. programme.
- Each semester shall have '**Continuous Internal Evaluation (CIE)**' and '**Semester End Examination (SEE)**'.
- Each student shall secure a total of **160 credits with a CGPA ≥ 5** required for the completion of the UG programme and the award of the B.Tech. degree.
- A student after securing admission into a B.Tech. programme at VNRVJIET shall pursue and acquire the B.Tech. degree in a **minimum period of four academic years i.e., 8 semesters** and a **maximum period of eight academic years i.e., 16 semesters** starting from the date of commencement of I year I semester, failing which the student shall forfeit the seat in B.Tech. programme.

10.0 DURATION OF THE ACADEMIC PROGRAMMES:

- Under CBCS, programme duration shall be defined by the period in which a student earns the prescribed credits for the award of B.Tech. degree.
- Hence, it is possible for an outstanding student to qualify for the award of degree in a shorter time than that of the duration specified for the concerned

programme. However, the B.Tech. degree shall be issued at the end of normal duration of the programme i.e., four years.

❖ **Normal Duration:**

- The duration of the B.Tech. degree programme shall be **four years**.
- The duration of the B.Tech. degree programme for students admitted under lateral entry scheme (LES) shall be **three years**.

❖ **Maximum Duration:**

- The **maximum period** in which a student can complete a full time B.Tech. degree programme shall be **twice the normal duration of the programme, i.e., eight years (16 semesters) for B.Tech. degree and six years (12 semesters) for students admitted under lateral entry scheme (LES) i.e., (For Diploma Holders) respectively.**
- The maximum period for a programme shall also be dictated by the fact that a student has to demonstrate the prescribed minimum academic performance by registering for the prescribed minimum number of credits in every semester, for continuing in the programme. This period can be equal to or lesser than the maximum period indicated as indicated above.

11.0 COURSES AND CREDIT STRUCTURE:

- Every course in the B.Tech. programme of study has a Lecture-Tutorial-Practical (L-T-P) component attached to it. Based upon the L-T-P structure, the credits are allotted to a course using the criteria as shown in the Table 2.

Table 2 Contact hour and credit structure

| Type of Course | Component | Contact Hours / Week | Credits (C) |
|------------------|----------------------|----------------------|-------------|
| Theory | Lecture (L) | 1 | 1 |
| | Tutorial (T) | 1 | 1 |
| Laboratory | Practical (P) | 2 | 1 |
| Drawing / Design | Drawing / Design (D) | 2 | 1 |

- Every course of the B.Tech. programme shall be offered by a specific section / department. The unique codes of the section / department offering the courses are given in the Table 3.

Table 3 Course offering section / department

| Course Offering Section / Department | Code |
|--------------------------------------|------|
| Physics | PH |
| Chemistry | CH |
| English | EN |
| Mathematics | MT |
| Management | MG |

| | |
|---|----|
| Humanities & Social Sciences | HS |
| Civil Engineering | CE |
| Electrical & Electronics Engineering | EE |
| Mechanical Engineering | ME |
| Electronics & Communication Engineering | EC |
| Computer Science & Engineering | CS |
| Electronics & Instrumentation Engineering | EI |
| Information Technology | IT |
| Automobile Engineering | AE |
| Computer Science & Business Systems | CB |

❖ **Structure:**

- Every B.Tech. programme of study shall be designed to have theory and laboratory courses. In addition, a student shall carry out internship, industry oriented mini-project, project, design sensitization, design thinking and other courses as prescribed in the curriculum of the programmes.
- Every course offered under a B.Tech. programme shall be placed in one of the course categories with minimum credits as listed in the Table 4.
- The course group / category along with their broad classification and description are listed in the Table 5.

Table 4 Category of Courses, their Codes and Distribution of Credits

| Type of Courses | | Course Category | Code | Range of Credits | Credit Composition (%) |
|----------------------|------------|--|------|------------------|------------------------|
| Compulsory Courses | Foundation | Engineering Science | ES | 16-25 | 10-16 |
| | | Basic Science | BS | 18-22 | 11-14 |
| | | Humanities & Social Science Incl. Management | HS | 8-11 | 5-6.9 |
| | Core | Professional Core | PC | 60-68 | 38-43 |
| | Project | Project | PW | 16 | 10 |
| Elective Courses | | Professional Elective | PE | 18 | 11 |
| | | Open Elective | OE | 12 | 7.5 |
| Mandatory Courses | | Audit | AU | Non-Credit | -- |
| | | Mandatory | MN | | -- |
| Total | | | | 160 | |
| MOOC | Online | | OL | -- | -- |
| Virtual Laboratories | Online | | VL | -- | -- |

Table 5 Description of Courses

| Broad Course Classification | Course Group / Category | Description of Courses |
|-----------------------------|---|--|
| Foundation | Basic Sciences | Includes mathematics, physics, chemistry and biology courses |
| | Engineering Sciences | Includes fundamental engineering courses |
| | Humanities and Social Sciences including Management | Includes courses related to humanities, social sciences and management |
| Core | Professional Core | Includes core courses related to the parent discipline / department / branch of engineering |
| | Project Work | B.Tech. project stage-I and stage-II |
| | Mini-project | Internship / Industry oriented mini-project / Design sensitization / Design thinking |
| Elective | Professional Electives | Includes elective courses related to the parent discipline / department / branch of engineering |
| | Open Electives | Elective courses which include inter – disciplinary courses or courses in an area outside the parent discipline / department / branch of engineering |
| Mandatory | - | Mandatory non-credit courses |
| Audit | - | |

12.0 REGISTRATION / DROPPING/ OFFERING OF COURSE(S):

❖ Course Registration:

- All the students must compulsorily register for course work at the beginning of each semester as per the schedule mentioned in the Academic Calendar.
- It is essential for the students to register for all the prescribed courses in time.
- The registration shall be organized by the department under the supervision of the Head of the Department.
- Every course may have one or more of its preceding course(s) as prerequisite(s).
- A 'faculty mentor' shall be assigned to a group of 20 students, who shall advise student about the under-graduate programme, its course structure and curriculum, choice / option for course / courses, based on their competence, progress, pre-requisites if any and interest.
- The academic section of the college shall invite 'registration forms' from students before the beginning of the semester through 'on-line registration', ensuring 'date and time stamping'.
- The on-line registration requests for any 'current semester' shall be **completed**

before the commencement of SEEs (Semester End Examinations) of the 'preceding semester'.

- A student shall register courses online with the approval of faculty mentor. A copy of it shall be retained by the student and other copies be submitted online to the concerned HoD, faculty mentor and Dean of Academics.
- A student may be permitted to register for the courses of his / her choice in a semester with credits as prescribed in the course structure of the concerned B.Tech. programme with a deviation of $\pm 22\%$ credits per semester for defining minimum and maximum credits, based on the progress and SGPA / CGPA, and completion of the 'pre-requisites' as indicated for various courses, in the course structure of the programmes and syllabus contents.
- Choice for 'additional courses' to reach the maximum permissible limit of **+ 22%** credits as specified in the course structure of the concerned programme, must be clearly indicated, which needs the specific approval and signature of the faculty mentor and HoD.
- Additional courses shall be offered only upon meeting the prerequisites, if any, as mentioned in the programme curriculum.
- **Course options exercised through 'on-line registration' shall be FINAL and cannot be changed or inter-changed; further, alternate choices also shall 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 unforeseen or unexpected reasons, then the student shall be allowed to have alternate choice either for a new course (subject to offering of such a course), or for another existing course (subject to the availability of seats). Such alternate arrangements shall be made by the Head of the Department, with due notification and time-frame schedule, within the **first week** after the commencement of class-work for that semester.
- **IN ABSENTIA registration shall not be permitted** under any circumstance.
- At the time of registration, students should have cleared all the dues of Institute and Hostel (if applicable) in the previous semesters, paid the prescribed fees for the current semester and not been debarred from Institute for a specified period on disciplinary or any other ground.

❖ **Open Elective Courses:**

- The students have to choose **one open elective course (OE-I) in fifth semester, one (OE-II) in sixth semester, one (OE-III) in seventh semester and one (OE-IV) in eighth semester** from the list of open electives as prescribed in the course structure of the programme.
- However, the **student cannot opt for an open elective course offered by their own (parent) department**, if it is already listed under any category of the courses offered by parent department in any semester.
- Courses that are already studied by a student cannot be pursued again/repeated even if offered.

❖ **Professional Elective Courses:**

- Students have to register for a total of **06 professional elective courses (PE-I to PE-VI)** from the list of professional elective courses as prescribed in the course structure of the programme.
- Compulsory core courses can be chosen by the students of the respective disciplines only. However, the students of a particular discipline can register

for discipline / interdisciplinary courses of other disciplines provided they have met the pre-requisite or when the pre-requisite is waived by Dean of Academics. Courses that are already studied by a student cannot be pursued again/repeated even if offered.

❖ **Dropping of Courses:**

- Dropping of one or more courses may be permitted, only after obtaining prior approval from the faculty mentor (subject to retaining of minimum credits as prescribed in these regulations), '**within a period of 15 days**' from the beginning of the current semester for maintaining studentship.
- The dropped courses are not recorded in the Grade Card.
- Student must complete the dropped course by registering them as and when offered in the next semester in order to earn the required credits. This is in addition to the minimum number of credits that are required to continue studentship in a semester. However, the total credits registered in a semester should not exceed the maximum number of credits permitted to register in that semester.

❖ **Courses to be Offered:**

- A typical section (or class) strength for each semester shall be **60**.
- A course may be offered to the students, **only if a minimum of 20 students (1/3 of the section strength) opt** for it. The **maximum strength** of a section is limited to **80** (60 + 1/3 of the section strength).
- More than one faculty member may offer the same course in any semester.
- Laboratory / practical may be included with the corresponding theory course in the same semester.
- However, in case of elective courses, selection / allotment of courses, based on the choice for students, shall be based on – '**first come first serve**' basis in the **on-line registration mode**.
- If more entries for registration of a course are received, then the HoD concerned shall decide, whether or not to offer such a course for **two (or multiple) sections** keeping in view the resources available in the department offering the course.

13.0 ATTENDANCE REQUIREMENTS AND DETENTION POLICY:

- A student shall maintain a **minimum required attendance** of **75%** in **AGGREGATE**.
- Minimum required attendance of 75% shall be maintained in all the mandatory courses offered like Environmental Science, Constitution of India, Intellectual Property Rights, Gender Sensitization lab etc.
- Two periods of attendance for each theory course shall be considered, if a student appears for the sessional examination of that course.
- Shortage of attendance up to 10% i.e., attendance between 65% to 75% in aggregate, may be condoned by the Institute Academic Committee based on the rules prescribed by the Academic Council of the Institute from time to time.
- **Shortage of attendance below 65 % shall in no case be condoned.**
- A stipulated fee, as fixed by the Institute, shall be payable towards condonation of shortage of attendance.
- **Students whose shortage of attendance is not condoned OR who have not paid the stipulated fee OR who have not cleared any other fee dues to the Institute in any semester are not eligible to write the Semester End Examination (SEE).**

- Students, who **do not meet the minimum required attendance** in a semester, shall be detained in that semester and their **registration for that semester shall stand cancelled. They shall not be promoted to the next semester.**
- Students detained in a semester shall seek re-admission into that semester as and when offered again.
- Academic regulations applicable to the semester in which re-admission is sought shall be applicable to the re-admitted student.
- In case if there are any professional electives and/or open electives, the same may also be re-registered if offered. However, if those electives are not offered in the later semesters, then alternate electives may be chosen from the **same** set of elective courses offered under that category.
- Any student against whom any disciplinary action is pending shall not be permitted to attend semester end examination (SEE) in that semester.
- A student fulfilling the attendance requirement in the present semester shall not be eligible for re-admission into the same class.

14.0 MINIMUM ACADEMIC REQUIREMENTS:

- In addition to the attendance requirements mentioned in **13.0** of these regulations for the award of B.Tech. degree, a student must satisfy the minimum academic requirements as given below:
- A student shall be deemed to have satisfied the minimum academic requirements and earn the credits for each **theory, practical, design and drawing** course in B.Tech. programme, if he secures
 - ✓ A **minimum of 35% marks** for each course in the **semester end examination (SEE)**, and
 - ✓ A **minimum of 40% marks** for each course considering **both CIE and SEE** taken together.
- A student shall be deemed to have satisfied the minimum academic requirements and earn the credits allotted to **internship, industry oriented mini-project, project, design sensitization and design thinking** courses, if he secures
 - ✓ A **minimum of 40% of total marks** for internship, industry oriented mini-project, project, design sensitization, design thinking courses
- A student shall be treated as **failed**, if he
 - ✓ **does not submit a report** on internship, industry oriented mini-project, project, design sensitization, design thinking courses, or
 - ✓ **does not make a presentation** of the same before the evaluation committee as per the schedule, or
 - ✓ **secures less than 40% marks** in overall evaluation.
 - ✓ In case of a student not meeting any of the above points, student may re-appear once for each of the evaluation of internship, industry oriented mini-project, project, design sensitization, design thinking courses, as scheduled by the evaluation committee; if the student fails in such 'one re-appearance' evaluation also, student has to re-appear for the same in the next subsequent semester, as and when it is scheduled.
- A student shall **register** for all the courses covering **160 credits** as specified and listed in the course structure of the B.Tech. programme, fulfills all the attendance and academic requirements for **160 credits**, '**earn all 160 credits**' by **securing SGPA ≥ 5.0** (in each semester) and **CGPA** (at the end of each successive semester) **≥ 5.0** to successfully complete the under-graduate

programme.

- If a student fails to secure a pass grade in a particular course, it is mandatory that he shall register and reappear for the examination in that course during the next semester when SEE is conducted in that course. It is mandatory that he should continue to register and reappear for the examination till he secures a pass grade.
- A student eligible to appear in SEE of any course, but remains absent from it or gets failed (failing to secure 'C' grade or above) may reappear for that course in the supplementary SEE as and when conducted. In such cases, CIE assessed earlier for that course shall be carried over, and added to the marks to be obtained in the supplementary SEE examination for evaluating the performance in that course.
- A student detained in a semester due to shortage of attendance, may be re-admitted into the same semester in the next academic year for fulfillment of the academic requirements.
- Academic regulations applicable to the semester in which re-admission is sought shall be applicable to the re-admitted student. However, no grade allotments or SGPA/ CGPA calculations shall be done for the entire semester in which the student has been detained.
- A student detained due to lack of credits, shall be promoted to the next year only after acquiring the required academic credits. Academic regulations applicable to the semester in which promotion is sought shall be applicable to the re-admitted student.
- A student shall register and put up **minimum academic requirement in all 160 credits and earn all 160 credits** for the award of B.Tech. degree.
- The student shall be qualified in **two certificate courses of 40 hours duration each** during his course of study. Out of the two certificate courses, **atleast one certificate course** shall be pursued through **MOOCs platform like SWAYAM-NPTEL online courses, Coursera online courses, BEC certification courses** etc.
- Students who **fail to earn atleast 160 credits** as indicated in the course structure **within eight academic years** counting from the year of their admission shall **forfeit their seat in B.Tech. programme and their admission stands cancelled**.

15.0 PROMOTION RULES:

- **Apart from the minimum required attendance conditions as specified in 13.0 of these regulations, the credit conditions to be fulfilled** by a student for getting promoted from the current semester to the next semester are given in the Table 6.

Table 6 Promotion Rules

| S. No. | Promotion | Conditions to be fulfilled |
|--------|--|---|
| 1 | First semester (I year I semester) to second semester (I year II semester) | i. Regular course of study of first semester (I year I semester) |
| 2 | Second semester (I year II semester) to third semester (II year I semester) | i. Regular course of study of second semester (I year II semester). ii. Must have secured atleast 50 % of the total credits upto second semester (I year II semester) i.e., 20 credits out of 40 credits of the respective programme from all the relevant regular and supplementary examinations, whether the student takes those examinations or not. |
| 3. | Third semester (II year I semester) to fourth semester (II year I semester) | i. Regular course of study of third semester (II year I semester). |
| 4 | Fourth semester (II year II semester) to fifth semester (III year I semester) | i. Regular course of study of fourth semester (II year II semester). ii. Must have secured atleast 60% of the total credits upto fourth semester (II year II semester) i.e., 48 credits out of 80 credits of the respective programme from all the relevant regular and supplementary examinations, whether the student takes those examinations or not. |
| 5 | Fifth semester (III year I semester) to sixth semester (III year II semester) | i. Regular course of study of fifth semester (III year I semester). |
| 6 | Sixth semester (III year II semester) to seventh semester (IV year I semester) | i. Regular course of study of sixth semester (III year II semester). ii. Must have secured atleast 60% of the total credits upto sixth semester (III year II semester) i.e., 73 credits out of 122 credits of the respective programme from all the relevant regular and supplementary examinations, whether the student takes those examinations or not. |
| 7 | Seventh semester (IV year I semester) to eighth semester (IV year II semester) | Regular course of study of seventh semester (IV year I semester) |

16.0 DISTRIBUTION OF MARKS AND EVALUATION METHODOLOGY:

- The performance of a student in each semester shall be evaluated course wise with a **maximum of 100 marks for theory and 100 marks for practical courses**. In addition, design sensitization, design thinking, internship, industry oriented mini-project, project stage-I and project stage-II courses shall be evaluated for **100 marks** each.

16.1 Theory Courses:

- The syllabus for the theory courses shall be divided into **SIX** units and each unit carries equal weightage in terms of marks distribution.
- For theory courses, the distribution of marks shall be **40 marks for Continuous Internal Evaluation (CIE)** and **60 marks for the Semester End Examination (SEE)**.

❖ Continuous Internal Evaluation (CIE - 40 M):

- Continuous Internal Evaluation (CIE) shall consist of sessional examination (SE - 30 M) and Class Assessment (CA - 10 M).

➤ Sessional Examination (SE - 30 M):

- For theory courses, **two sessional examinations** shall be conducted in each semester as per the academic calendar. Each sessional examination shall be evaluated for 30 marks.

- Question paper pattern for sessional examination (30 Marks) shall be as follows:

PART-A: 3 X 2 M = 6 M

a. There shall be one question from each unit.

b. All questions are compulsory.

PART-B: 3 X 8 M = 24 M

a. There shall be one question from each unit with internal choice i.e., 'either' 'or' choice.

b. The student shall answer one question from each unit.

c. There could be a maximum of two sub divisions in a question i.e., (a) and/or (b).

- Average of two SEs** shall be calculated and used as the final sessional marks for each course.

➤ Class Assessment (CA - 10 M):

- Two class assessments** consisting of any one of the alternative assessment tools (AAT) like online quiz / assignment / objective exam / course project / case study etc. shall be conducted covering the syllabus that is completed at the time of conducting the CA and evaluated for 10 marks each.

- The first and second CAs shall be conducted during the instruction days as mentioned in the Academic Calendar.

- Average of two CAs** shall be calculated and used as the final class assessment marks.

- The valuation and verification of answer scripts of CIE shall be completed within a week after the conduct of the examination.

❖ Semester End Examination (SEE - 60 M):

- The SEE shall be conducted at the end of semester for a total of **60 marks** of **3 hours** duration.

- The syllabus for the theory courses shall be divided into **SIX** units and each

- unit carries equal weightage in terms of marks distribution.
- Question paper pattern for SEE (60 Marks) shall be as follows:
PART-A: 6 X 2 M = 12 M
 - a. There shall be one question from each unit.
 - b. All questions are compulsory.**PART-B: 6 X 8 M = 48 M**
 - a. There shall be one question from each unit with internal choice i.e., 'either' 'or' choice.
 - b. The student shall answer one question from each UNIT.
 - c. There could be a maximum of two sub divisions in a question i.e., (a) and/or (b).

16.2 Practical Courses:

- For practical courses, there shall be a **continuous internal evaluation (CIE)** during the semester for **40 marks** and **60 marks** for **semester end examination (SEE)**. Out of the 40 marks allocated to CIE, **10 marks** shall be for **day-to-day work** in the laboratory, **10 marks** for the **practical examination** to be conducted at the end of semester, **10 marks** for **team course project** and **10 marks** for **laboratory record**.
- Laboratory SEE shall be conducted at the end of semester for a total of **60 marks** of **3 hours** duration. Out of the 60 marks allocated to SEE, **15 marks** shall be for **initial procedures & diagrams**, **20 marks** for **conduct of experiment & collection of data**, **10 marks** for **analysis of data / results / graphs etc.** and **15 marks** for **viva-voce / course project**.
- SEE shall be conducted by two examiners, one internal and other external concerned with the subject area from the same / other department / Industry.

NOTE:

- Any student who shall **remain absent for any of the CIE**, for any reason what so ever, shall be deemed to have **secured 'zero' marks in the examination** and **no makeup examination shall be conducted**.

16.3 Supplementary Semester End Examinations:

- Supplementary examinations shall be conducted along with regular semester end examinations (SEE).
- During SEE of even semester, supplementary examinations of odd semester shall be conducted and during SEE of odd semester, supplementary examinations of even semester shall be conducted.

16.4 Drawing and / or Design Courses:

- For drawing and / or design courses, (such as Engineering Drawing, Engineering Graphics, Geometric Drawing etc.) there shall be **continuous internal evaluation (CIE)** for **40 marks** and **60 marks** for **semester end examination (SEE)**.
- Out of the 40 marks allocated to CIE, **10 marks** shall be for **day-to-day drawing / design activity**, **20 marks** for the **sessional examination** and **10 marks** for **team course project**.
- **Two sessional examinations** shall be conducted in each semester as per the academic calendar. Each sessional examination shall be evaluated for **20 marks**.
- **Average of two sessional examinations** shall be calculated and used as the final

sessional marks.

- SEE shall be conducted at the end of semester for a total of **60 marks** of **3 hours** duration. The syllabus for the drawing courses is divided into SIX units and each unit carries equal weightage in terms of marks distribution.
- Question paper pattern for semester end examination (60 Marks) is as follows.
6 X 10 M = 60 M
 - a. There shall be 01 question from each unit with internal choice i.e., 'either' 'or' choice.
 - b. The student shall answer one question from each UNIT.
 - c. There could be a maximum of two sub-divisions in a question i.e., (a) and/or (b).

16.5 Design Sensitization and Design Thinking Courses:

- A student shall take up **01 credit 'Design Sensitization'** course as prescribed in the course structure of the concerned B.Tech. programme.
- A student shall understand the day-to-day life domestic applications and design small objects/applications based on an idea conceived as part of this course content.
- '**Design Sensitization'** course shall be evaluated for **100 marks**.
- **CIE** shall be evaluated for **40 marks** by a committee consisting of Head of the Department, course coordinator/teacher and senior faculty member of the department.
- CIE shall be made on the basis of **two seminars** conducted and as per the evaluation format provided by the DoA.
- **SEE** shall be evaluated for **60 marks** by a committee consisting of Head of the Department, course coordinator/teacher and an external expert from industry.
- As part of the evaluation, a student shall submit a detailed report regarding the design idea and its conception into a prototype/simulation model etc.
- A student shall take up **02 credit 'Design Thinking'** course leading to project as prescribed in the course structure of the concerned B.Tech. programme.
- A student shall demonstrate design and development of prototype of engineering applications based on the idea conceived as part of the course content.
- '**Design Thinking'** course leading to independent project shall be evaluated based on capstone project for **100 marks**.
- Evaluation of the course shall consist of both CIE and SIE.
- **CIE** shall be evaluated for **40 marks** by a committee consisting of Head of the Department, course coordinator/teacher and senior faculty member of the department.
- CIE shall be made on the basis of **two seminars** conducted and as per the evaluation format provided by the DoA.
- **SEE** shall be evaluated for **60 marks** by a committee consisting of Head of the Department, course coordinator/teacher and an external expert from industry.
- As part of the evaluation, a student shall submit a detailed report regarding the design idea and its conception into a prototype/simulation model etc.

16.6 Internship:

- A student shall take up **01 credit summer internship** in an industry/research organization/academic institution during the summer vacation after fourth semester (II year II semester) of the B.Tech. programme.
- Internship shall be carried out for a **minimum period of 02 weeks and maximum**

of 04 weeks.

- Internship shall be evaluated for **100 marks** in the fifth semester (III year I semester). There shall be no CIE for internship.
- Evaluation of the Internship shall be done by a committee consisting of the Head of the Department, faculty supervisor and a senior faculty member of the department.
- A student shall submit a detailed report regarding the internship and present it before the committee for evaluation.

16.7 Industry Oriented Mini-Project:

- A student shall undergo an **industry oriented mini-project**, in collaboration with an industry of their specialization, during the summer vacation after sixth semester (III year II semester) of the B.Tech. programme.
- Industry oriented mini-project shall be carried out for **a minimum period of 04 weeks and maximum of 06 weeks**.
- Evaluation of the mini-project shall be done by a committee consisting of the Head of the Department, faculty supervisor and a senior faculty member of the department.
- The industry oriented mini-project shall be submitted in a report form and presented before a committee, which shall evaluate it for **100 marks**. There shall be no CIE for industry oriented mini-project.
- However, attending the shadow engineering programme or any such other programme, in lieu thereof, is a pre-requisite for evaluating industry oriented mini-project.

16.8 Project:

- A student shall initiate major project in seventh semester (IV year I semester) and continue it in the eighth semester (IV year II semester).
- Project shall be carried out in two stages i.e. stage-I in the seventh semester and stage-II in the eighth semester.
- Project shall be evaluated for a total of **200 marks**. Out of which, **project stage-I** shall be evaluated for **100 marks in seventh semester** and **project stage-II** for **100 marks in eighth semester**.
- Evaluation of project stage-I and project stage-II shall consist of both CIE and SEE in each semester.
- **CIE** shall be carried out for **40 marks** both in stage-I and stage-II.
- CIE shall be done by a committee consisting of Head of the Department, project supervisor and senior faculty member of the Department.
- CIE shall be done on the basis of **two seminars** conducted in each semester as per the academic calendar and as per the evaluation format provided by the DoA.
- **SEE** shall be carried out for **60 marks** in both stage-I and stage-II.
- **SEE in stage-I** shall be conducted by a committee consisting of Head of the Department, the project supervisor and one senior faculty of the programme.
- **SEE in stage-II (project viva-voce)** shall be conducted by a committee consisting of an external examiner, Head of the Department, the project supervisor and one senior faculty of the programme.

16.9 MOOC:

- Meeting with the global requirements, to inculcate the habit of self-learning and in compliance with the UGC guidelines, MOOC (Massive Open Online Courses) have been introduced in these regulations.
- The proposed MOOCs would be additional choices in all the elective group courses subjected to their offering in the department, availability in the MOOC platform during the respective semesters as well as according to the guidelines specified by the Academic Section for offering of such courses at that time.
- As per the guidelines issued by the Academic Section regarding equivalency conditions of the MOOC, concerned departments shall declare the BoS approved list of the courses that a student can pursue through MOOCs at the beginning of the semester.
- Students interested in pursuing MOOCs shall register the course title at their department office before the start of the semester against the courses that are announced by the department.
- Course content for the selected MOOCs shall be drawn from the respective MOOCs link or shall be supplied by the department.
- Course progress shall be monitored by the course coordinator designated by the HoD.
- Assessment & evaluation of the courses shall be done by the respective department designated MOOC Coordinator.
- Grade obtained through the evaluation of the selected course pursued through MOOC shall be considered for the SGPA/CGPA calculation.
- Equivalent credits* shall be awarded upon successful completion of each MOOC course.
- *Detailed guidelines regarding credit transfer of the courses pursued through MOOC shall be issued time to time by the Academic Section.

16.10 Value Added Courses:

- The value-added courses / certificate courses offered through joint ventures with various industries / organizations provide ample scope for the students as well as faculty to keep pace with the latest technologies pertaining to their chosen field of studies.
- A plenty of value added programmes approved by the BoS shall be proposed by the departments one week before the commencement of classes.
- The students are given the option to choose the course inclinations as per their choice.
- Students interested in pursuing value added courses shall register for the courses in the department office at the beginning of the semester against the courses that are announced by the department.
- Course progress shall be monitored by the course coordinator designated by the HoD.
- Result of value-added courses shall be declared with **"Satisfactory"** or **"Not Satisfactory"** performance.
- Grade obtained through value added course shall not be considered for the SGPA/CGPA calculation.

16.11 Mandatory and Audit Courses:

- A student shall pursue the entire mandatory and audit courses as specified in the course structure of the B.Tech. programme.
- These courses are among the compulsory courses and **do not carry any credits.**

- The students shall have four chances in total to clear a specific mandatory and audit course.
- Mandatory courses shall not carry any credits but, securing **40 marks out of 100**, shall be **necessary requirement** for the student to qualify for the **award of Degree**.
- Result of mandatory and audit courses shall be declared with **"Satisfactory"** or **"Not Satisfactory"** performance.
- No marks or letter grade shall be allotted.

16.12 Virtual Laboratories:

- The Virtual Laboratories are internet enabled experiments for remote operation so as to enhance the curiosity and innovation of students and provide hands-on sessions. The main aim of virtual labs is to enthuse the students about performing 'experiments' and thereby getting them interested in their respective disciplines in a meaningful way. It is expected that the competence level of the engineering students will enhance through the use of these labs.
- Advanced laboratories / experiments that are not existing in the Institute and are required for supplementing the knowledge gained in specific course(s) may be pursued by the students though the use of Virtual Labs.
- Departments offering B.Tech. programmes shall define the list of virtual laboratories that a student can take up during the duration of course of study.
- The decision to pursue a virtual laboratory course by a student shall be optional and also in addition to the mandatory requirement of pursuing practical courses as specified in the course structure of the programme.
- The virtual laboratories / experiments that a student decides to pursue must be communicated to the Academic Section through HoD.

17.0 CONDUCT OF SEMESTER END EXAMINATIONS AND EVALUATION:

- Semester end examination (SEE) shall be conducted by the Controller of Examinations (COE) by inviting Question Papers from the External Examiners.
- Question papers may be moderated for the coverage of syllabus, pattern of questions by an examiner appointed by the CoE. The appointed examiner shall prepare a detailed answer key and scheme of valuation and submit it to the CoE.
- Laboratory SEE shall be conducted involving internal and external examiners as defined in these regulations.

18.0 SCHEME FOR THE AWARD OF DEGREE:

❖ Award of B.Tech. Degree:

- A student shall be declared eligible for the award of the B.Tech. degree if he/she fulfils the following academic regulations:
- Pursued **a programme of study for not less than four academic years and not more than eight academic years**.
- Registered for **160 credits** and secured a minimum of **160 credits**.

NOTE: Students, who fail to fulfill all the academic requirements for the award of the degree within eight academic years from the year of their admission, shall forfeit their seat in B.Tech. programme.

❖ Award of B.Tech. Honors Degree:

- A student shall be **awarded B.Tech. degree with Honors**, if he **secures additional 20 credits** (over and above 160 credits for the regular B.Tech. degree) in III year and IV year only with **atleast 7.5 CGPA for Honors** and **acquiring 160 credits successfully with atleast 7.5 CGPA for regular B.Tech. and passing all subjects in first attempt.**

Ex: **B.Tech. (Honors) - CSE**

- Weekly instruction hours, internal & external evaluation of theory, laboratory and mini project courses and award of grades of B.Tech. Honors degree are the same as that of regular 4 year B.Tech. degree as mentioned in these regulations.
- **No transfer of credits** from courses of **Honors programme to regular B.Tech. degree** & vice versa.
- **Eligibility Conditions:**
- Students **pursuing V semester** (III year I semester) who have **passed all courses in first attempt in all the semesters with 7.5 or more CGPA** till the results announced.
- If more than 30% of the students in a branch fulfil the eligibility criteria (as stated above), the number of eligible students shall be limited to 30% based on the CGPA criteria till III semester (II year I semester).
- If a student fails in any registered course of either B.Tech. degree or Honors degree in any semester of four years program, then the student shall not be eligible for obtaining Honors degree and shall be eligible for only B.Tech. degree.
- Prior approval of faculty mentor / advisor and Head of the Department for the enrolment into Honors program, before commencement of V semester (III year I semester) is mandatory.
- **Courses** opted must be from the **prescribed list** as given in the Honors course structure and also **not studied/registered** in the **regular B.Tech. degree.**
- **Student opting for Honors is not eligible to choose a Minor degree** and vice-versa.
- Additional 20 credits secured for the Honors shall not be considered for CGPA calculation of B.Tech. degree.

❖ Award of B.Tech. Minor Degree:

- A student shall be **awarded B.Tech. Minor degree in a specified programme** if he **secures additional 18 credits** (over and above 160 credits for the regular B.Tech. Degree) during III year and IV year only.

Ex: **B.Tech. in Mechanical Engineering with Minor in Data Science**

- If a student is unable to secure additional 18 credits in a specified duration (twice the duration of the course), then the student shall not be awarded Minor degree. However, if the student earns all the required 160 credits of B.Tech., then student shall be awarded only B.Tech. degree in the concerned branch.
- Weekly instruction hours, internal & external evaluation of theory, laboratory and mini project courses and award of grades of B.Tech. Minor degree are the same as that of regular 4 year B.Tech. degree as mentioned in these regulations.
- **No transfer of credits** from courses of **minor programme to regular B.Tech. degree** & vice versa.
- Student can **choose only one minor programme** along with his/her basic engineering degree.

- **Student opting for minor programme shall not be eligible to choose honors degree** and vice-versa.
 - **Eligibility conditions:**
 - Students shall **not have active backlogs till III semester** (II year I semester) while **entering into V semester** (III year I semester).
 - If more than 50% of the students in a branch fulfil the eligibility criteria (as stated above), the number of eligible students shall be limited to 50% based on the CGPA criteria.
 - Prior approval of faculty mentor / advisor and Head of the Department for the enrolment into minor programme before commencement of V semester (III year I semester) is mandatory.
 - **Courses** opted must be from the **prescribed list** as given in the minor degree course structure and also **not studied/registered** in the **regular B.Tech. degree**.
 - All these 18 credits need to be completed in III year and IV year only.
- Detailed instructions shall be issued by the Academic Section before commencement of V semester.

19.0 PERFORMANCE AND GRADING SYSTEM:

- Performances of students in each of the courses in the programme are expressed in terms of Letter Grades based on an absolute grading system. The 10-point grading system with letter grades and their grade points are shown in the Table 7.

Table 7 Grade and Grade Points

| Marks Obtained | Letter Grade | Description of Grade | Grade Points (GP) |
|-----------------------------|--------------|----------------------|-------------------|
| ≥ 90 | O | Outstanding | 10.00 |
| ≥ 80 and < 89.99 | A+ | Excellent | 9.00 |
| ≥ 70 and < 79.99 | A | Very Good | 8.00 |
| ≥ 60 and < 69.99 | B+ | Good | 7.00 |
| ≥ 50 and < 59.99 | B | Average | 6.00 |
| ≥ 40 and < 49.99 | C | Pass | 5.00 |
| < 40 | F | Fail | -- |
| Not Appeared in the Exam(s) | Ab | Absent | -- |

- A student is eligible for the award of the B.Tech. degree with the class as mentioned in the Table 8.

Table 8 CGPA and Class

| CGPA | Class |
|------------------------|------------------------------|
| ≥ 7.5 | First Class with Distinction |
| ≥ 6.5 and < 7.5 | First Class |
| ≥ 5.5 and < 6.5 | Second Class |
| ≥ 5.0 and < 5.5 | Pass Class |

- For mandatory and audit courses (non-credit), student shall be awarded 'Satisfactory' or "Not satisfactory" without any credit. This shall not be counted for the computation of SGPA/CGPA.

20.0 COMPUTATION OF SGPA AND CGPA:

➤ CALCULATION OF SEMESTER GRADE POINT AVERAGE (SGPA):

- The performance of each student at the end of each semester shall be indicated in terms of SGPA. The SGPA shall be calculated as below:

$$\text{SGPA} = \frac{\text{Total earned weighted grade points in a semester}}{\text{Total credits in a semester}}$$

$$\text{SGPA} = \frac{\sum_{i=1}^p C_i * G_i}{\sum_{i=1}^p C_i}$$

where C_i = Number of credits allotted to a particular course 'i'
 G_i = Grade point corresponding to the letter grade awarded to the course 'i'
 $i = 1,2,\dots,p$ represent the number of courses in a particular semester

NOTE: SGPA is calculated and awarded to those students who pass all the courses in a semester.

➤ CALCULATION OF CUMULATIVE GRADE POINT AVERAGE (CGPA):

The CGPA of a student for the entire programme shall be calculated as given below:

- Assessment of the overall performance of a student shall be obtained by calculating cumulative grade point average (CGPA), which is weighted average of the grade points obtained in all courses during the course of study.

$$\text{CGPA} = \frac{\text{Total earned weighted grade points for the entire programme}}{\text{Total credits for the entire programme}}$$

$$\text{CGPA} = \frac{\sum_{j=1}^m C_j * G_j}{\sum_{j=1}^m C_j}$$

where C_j = number of credits allotted to a particular course 'j'
 G_j = grade point corresponding to the letter grade awarded to that course 'j'
 $j = 1,2,\dots,m$ represent the number of courses of the entire programme.

- Grade lower than C in any course shall not be considered for CGPA calculation. The CGPA shall be awarded only when the student acquires the required number of credits prescribed for the programme.

➤ **GRADE CARD:**

The grade card issued shall contain the following:

- The credits for each course offered in that semester
- The letter grade and grade point awarded in each course
- The SGPA/CGPA
- Total number of credits earned by the student up to the end of that semester.

➤ **ILLUSTRATION OF COMPUTATION OF SGPA AND CGPA:**

❖ **Illustration of calculation of SGPA:**

| Course Name | Course Credits (C) | Letter Grade | Grade Point (GP) | Credit Point (CP = C x GP) |
|----------------------|--------------------|----------------------------|------------------|----------------------------|
| Course 1 | 3 | A | 8 | 3 x 8 = 24 |
| Course 2 | 4 | B+ | 7 | 4 x 7 = 28 |
| Course 3 | 3 | B | 6 | 3 x 6 = 18 |
| Course 4 | 3 | O | 10 | 3 x 10 = 30 |
| Course 5 | 3 | C | 5 | 3 x 5 = 15 |
| Course 6 | 4 | B | 6 | 4 x 6 = 24 |
| TOTAL CREDITS | 20 | TOTAL CREDIT POINTS | | 139 |

$$\text{Thus, SGPA} = \frac{139}{20} = 6.95$$

❖ **Illustration of calculation of CGPA upto II semester:**

| Semester | Course Name | Course Credits (C) | Letter Grade Secured | Grade Point (GP) | Credit Point (CP = C x GP) |
|----------------------|-------------|--------------------|----------------------------|------------------|----------------------------|
| I | Course 1 | 4 | A | 8 | 32 |
| I | Course 2 | 3 | O | 10 | 40 |
| I | Course 3 | 3 | B | 6 | 18 |
| I | Course 4 | 3 | C | 5 | 15 |
| I | Course 5 | 1 | A+ | 9 | 9 |
| I | Course 6 | 1 | B+ | 7 | 7 |
| I | Course 7 | 3 | O | 10 | 30 |
| I | Course 8 | 1 | C | 5 | 5 |
| I | Course 9 | 1 | A | 8 | 8 |
| II | Course 10 | 3 | A | 8 | 24 |
| II | Course 11 | 3 | A+ | 9 | 27 |
| II | Course 12 | 3 | B | 6 | 18 |
| II | Course 13 | 3 | A | 8 | 24 |
| II | Course 14 | 3 | A+ | 9 | 27 |
| II | Course 15 | 1 | A | 8 | 8 |
| II | Course 16 | 1 | A | 8 | 8 |
| II | Course 17 | 2 | B | 6 | 12 |
| II | Course 18 | 1 | A+ | 9 | 9 |
| TOTAL CREDITS | | 40 | TOTAL CREDIT POINTS | | 321 |

$$\text{Thus, CGPA} = \frac{321}{40} = 8.02$$

- The above illustrated process of calculation of CGPA shall be followed for each subsequent semester until eighth semester i.e., (IV year II semester).
- The CGPA obtained at the end of eighth semester i.e., (IV year II semester) shall be the final CGPA secured by the student for the entire B.Tech. programme.

21.0 REVALUATION:

- Student can register for the revaluation by paying a prescribed fee.
- The Controller of Examinations (CoE) shall arrange for the revaluation and declare the results.
- Revaluation shall not be permitted to the courses other than theory courses.

22.0 CREDIT TRANSFER:

- Credit transfer of a student from other Institution to VNRVJIET is permitted for under-graduate programme as per the GOs from the Government of Telangana.

❖ Credit transfer from another Institution to VNRVJIET:

- A student studying in another Institution can take transfer to VNRVJIET against notification and orders issued by the Government of Telangana, under the following conditions:
 - ✓ When a student seeks transfer, equivalent credits shall be assigned to the student based on the equivalent courses studied earlier by the student.
 - ✓ The student, when transferred from other Institution, must follow the rules and regulations of VNRVJIET.
 - ✓ To graduate from VNRVJIET, a transferred student must study at least half of the minimum duration prescribed for a programme at VNRVJIET.

❖ Credit transfer facility through MOOC:

- Detailed guidelines regarding credit transfer of the courses pursued through MOOC shall be issued time to time by the Academic Section.

23.0 WITH-HOLDING OF RESULTS:

- If a student has not paid the pending fee dues to the institute / if any case of indiscipline / malpractice is pending against him, the results of such student shall be withheld.
- The issue of the award of the provisional certificate and the B.Tech. degree is liable to be withheld in such cases.

24.0 DISCIPLINE:

- Every student is required to observe discipline and decorum both inside and outside the institute and not to indulge in any activity which shall tend to bring down the honor of the institute.
- If a student indulges in malpractice in any of the theory / practical CIE or SEE, he shall be liable for punitive action as prescribed by the Institute from time to time.

25.0 TRANSITORY REGULATIONS:

❖ **Students detained due to lack of attendance:**

- A student who has been detained in any semester of B.Tech. I, II, III and IV years of R13/R15/R18 academic regulations for want of attendance, shall be permitted to rejoin the corresponding semester of R19 academic regulation as and when he becomes eligible.
- He is required to complete the study of B.Tech. programme within the stipulated period of eight academic years from the year of first admission in B.Tech. I Year.
- R19 academic regulations shall be applicable to the student from the semester of readmission onwards.
- He shall take up equivalent courses, as substitute courses in place of repeated courses as decided by the Chairman of the BoS of the respective departments.

❖ **Students detained due to shortage of credits:**

- A student of R13/R15/R18 academic regulations who has been detained due to shortage of credits, shall be promoted to the next semester of R19 academic regulations only after acquiring the required credits as per the corresponding academic regulations of his first admission.
- He is required to complete the study of B.Tech. programme within the stipulated period of eight academic years from the year of first admission in B.Tech. I year.
- R19 academic regulations shall be applicable to the student from the semester of readmission onwards.

❖ **For readmitted students in R19 Academic Regulations:**

- A student who has failed in any course(s) under any regulation has to pass those course(s) in the same regulations.
- Minimum academic requirement of R19 academic regulation shall be applicable to all the readmitted students.
- Credit structure as defined in the course structure of B.Tech. programmes under R19 academic regulation shall be followed from the semester of readmission.
- If a student readmitted to R19 academic regulations, has any course with 80% of syllabus common with his previous regulations, then that particular course in R19 academic regulations shall be substituted by another course as suggested by the Board of Studies (BoS) of the concerned department.
- If a student readmitted to R19 academic regulations, has not studied any courses/topics in his/her earlier regulations of study which is prerequisite for further courses in R19 academic regulations, the department HoD concerned shall conduct remedial classes to cover those courses/topics for the benefit of the students.
- There shall be **no branch transfers** after the completion of admission process.
- **The decision of the Institute Academic Committee shall be final in respect of equivalent courses for those students who are transferred from other colleges. The transfer of students from other college to VNRVJIET is to be approved by the Governing Council of the Institute.**

26.0 MINIMUM INSTRUCTION PERIOD:

- The minimum instruction period for each semester shall be **16 weeks**.

27.0 GENERAL:

- Where the words "he", "him", "his", occur in the regulations, they include "she", "her", "hers".
- The academic regulations should be read as a whole for the purpose of any interpretation.
- In the case of any discrepancy/ambiguity/doubt arising in the above rules and regulations, the decision of the Principal shall be final.
- The Chairman, Academic Council may change or amend any or all of the academic regulations or syllabi at any time and the changes or amendments made shall be applicable to all the students concerned with effect from the dates as notified by the Institute.

ACADEMIC REGULATIONS FOR B.TECH. - LATERAL ENTRY SCHEME (LES)

(Applicable for students admitted from the academic year 2020-2021)

30.0 MINIMUM ACADEMIC REQUIREMENTS:

- Attendance requirements and detention policy of four year B.Tech. regular degree programmes as specified in 13.0 of these regulations is adopted for students admitted to B.Tech. degree programme under lateral entry scheme (LES).
- Academic performance requirements as specified in 14.0 of these regulations are adopted for students admitted to B.Tech. degree programme under lateral entry scheme (LES).
- **Student who fails to fulfill all the academic requirements for the award of the degree within six academic years** from the year of his/her admission, shall forfeit his/her seat in B.Tech. programme and his/her admission stands cancelled.

31.0 PROMOTION POLICY:

Apart from the minimum required attendance conditions as specified in 13.0 of these regulations, the credit conditions to be fulfilled by a student for getting promoted from the current semester to the next semester are given below:

- For promotion from fourth semester (II year II semester) to fifth semester (III year I semester), a student must secure atleast **50% of the total credits up to fourth semester** (II year II semester) i.e., **20 credits out of 40 credits** of the B.Tech. programme of study.
- For promotion from sixth semester (III year II semester) to seventh semester (IV year I semester), a student must secure atleast **60% of the total credits up to sixth semester** (III year II semester) i.e., **49 credits out of 82 credits** of the B.Tech. programme of study.

32.0 SCHEME FOR THE AWARD OF DEGREE:

❖ Award of B.Tech. Degree:

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

- Pursued a programme of study for not less than three academic years and not more than six academic years.
- Registered for **120 credits** and secured a minimum of **120 credits**.

Rules for B.Tech. Honors degree and B.Tech. Minor degree shall be same as mentioned in 18.0 of these regulations.

MALPRACTICE RULES

DISCIPLINARY ACTION FOR IMPROPER CONDUCT IN EXAMINATIONS

| S.No. | Nature of Malpractices/Improper conduct | Punishment |
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| | If a student: | |
| 1. (a) | Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, cell phones, pager, palm computers or any other form of material concerned with or related to the course of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the student which can be used as an aid in the course of the examination) | Expulsion from the examination hall and cancellation of the performance in that course only. |
| (b) | Gives assistance or guidance or receives it from any other student orally or by any other body language methods or communicates through cell phones with any student or persons in or outside the exam hall in respect of any matter. | Expulsion from the examination hall and cancellation of the performance in that course only of all the students involved. In case of an outsider, he shall be handed over to the police and a case is 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 course of the examination (theory or practical) in which the student is appearing. | Expulsion from the examination hall and cancellation of the performance in that course and all other courses the student has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the courses of that Semester/year. The Hall Ticket of the student is to be cancelled and sent to the Controller of Examinations. |
| 3. | Impersonates any other student in connection with the examination. | The student who has impersonated shall be expelled from examination hall. The student is also debarred and forfeits the seat. The performance of the original student, who has been impersonated, shall be cancelled in all the courses of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining |

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| | | <p>courses of that semester/year. The student is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the student is course to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he shall be handed over to the police and a case is registered against him.</p> |
| 4. | <p>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.</p> | <p>Expulsion from the examination hall and cancellation of performance in that course and all the other courses the student has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The student is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the student is course to the academic regulations in connection with forfeiture of seat.</p> |
| 5. | <p>Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.</p> | <p>Cancellation of the performance in that course.</p> |
| 6. | <p>Refuses to obey the orders of the Controller of Examinations /Additional Controller of Examinations/any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the COE or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the COE or any person on duty in or outside the examination hall or any of his relations, or</p> | <p>In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that course and all other courses the student(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the courses of that semester/year. The students also are debarred and forfeit their seats. In case of outsiders, they shall be handed over to the police and a police case is registered against them.</p> |

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| | indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the Institute premises 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. | |
| 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 course and all the other courses the student has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The student is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the student is course 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 the performance in that course and all other courses the student has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The student is also debarred and forfeits the seat. |
| 9. | If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8. | Student of the colleges expulsion from the examination hall and cancellation of the performance in that course and all other courses the student has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The student is also debarred and forfeits the seat. Person(s) who do not belong to the College shall be handed over to |

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| | | police and, a police case shall 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 course and all other courses the student has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. |
| 11. | Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny. | Cancellation of the performance in that course and all other courses the student has appeared including practical examinations and project work of that semester/year examinations. |
| 12. | If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the Principal for further action to award suitable punishment. | |

Malpractices identified by squad or special invigilators:

Punishments shall be given to the students as per the above guidelines.

Malpractice identified at Spot center during valuation:

The following procedure shall be followed in the case of malpractice cases detected during valuation, scrutiny etc. at spot center:

1) Malpractice is detected at the spot valuation.

The case is to be referred to the malpractice committee. Malpractice committee shall meet and discuss/question the student and based on the evidences, the committee shall recommend suitable action on the student.

2) A notice is to be served to the student(s) involved, through the Principal, to his address and to the student(s) permanent address regarding the malpractice and seek explanations.

3) The involvement of staff who are in-charge of conducting examinations, invigilators, examiners valuing examination papers and preparing / keeping records of documents related to the examinations in such acts (inclusive of providing incorrect or misleading information) that infringe upon the course of natural justice to one and all concerned at the examinations shall be viewed seriously and recommend for award of appropriate punishment after thorough enquiry.

4) Based on the explanation by the party involved and recommendations of the committee action may be initiated.

5) Malpractice committee:

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| i. Dean of Academics | Chairman |
| ii. Controller of Examinations | Convener |
| iii. Invigilator | Member |
| iv. Chief Examiner of the course/course expert | Member |
| v. Concerned Head of the Department | Member |