

ACADEMIC RULES AND REGULATIONS

SRIT R20

B. Tech (Regular- Fulltime)

(Effective for the students admitted into I Year from the Academic year **2020- 2021**)

&

B. Tech (Lateral Entry Scheme)

(Effective for the students admitted into II Year from the Academic year **2021- 2022**)



SRINIVASA RAMANUJAN INSTITUTE OF TECHNOLOGY (AUTONOMOUS)

Affiliated to JNTUA & Approved by AICTE
Accredited by NAAC with 'A' Grade & NBA (CSE, ECE & EEE)
Rotarypuram Village, B K Samudram Mandal,
Ananthapuramu - 515701.

**FAILURE TO READ AND UNDERSTAND THE
REGULATIONS IS NOT EXCUSE**

Preliminary Definitions and Nomenclature

AICTE: Means All India Council for Technical Education, New Delhi.

Autonomous Institute: Means an institute designated as Autonomous by University Grants Commission (UGC), New Delhi in concurrence with affiliating University (Jawaharlal Nehru Technological University Anantapur, Ananthapuramu).

Academic Autonomy: Means freedom to an institute in all aspects of conducting its academic programs, granted by UGC for Promoting Excellence.

Academic Council: The Academic Council is the 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 UGC regulations and it has the right to take decisions on all academic matters including academic research.

Board of Studies (BOS): BOS is an authority as defined in UGC regulations, constituted by Head of the Organization for each of the departments separately. They are responsible for curriculum design and modification in respect of all the programs offered by a department.

Academic Year: It is the period necessary to complete an actual course of study within a year. It comprises two main semesters i.e., (one odd and one even).

Branch: Means specialization in a program like B. Tech degree program in Civil Engineering, B. Tech degree program in Computer Science and Engineering etc.

Backlog Course: A course is considered to be a backlog course, if the student has obtained a failure grade in that course.

Basic Sciences: The courses offered in the areas of Mathematics, Physics, Chemistry etc., are considered to be foundational in nature.

Commission: Means University Grants Commission (UGC), New Delhi.

Choice Based Credit System: The credit-based semester system is one which provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching along with provision of choice for the student in the course selection.

Certificate Course: It is a course that makes a student to have hands-on expertise and skills required for holistic development in a specific area/field.

Compulsory course: Course required to be undertaken for the award of the degree as per the program.

CIA: Continuous Internal Assessment.

Core: The courses that are essential constituents of each engineering discipline are categorized as professional core courses for that discipline.

Course: A course is a subject (Theory/Practical) offered by a department for learning in a particular semester.

Course Outcomes: The essential skills that need to be acquired by every student through a course.

Credit: A credit is a unit that gives weight to the value, level or time requirements of an academic course. The number of 'Contact Hours' in a week of a particular course determines its credit value.

Credit point: It is the product of grade point and number of credits for a course.

Cumulative Grade Point Average (CGPA): It is a measure of cumulative performance of a student overall the completed semesters. The CGPA 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.

Curriculum: Curriculum incorporates the planned interaction of students with instructional content, materials, resources, and processes for evaluating the attainment of Program Outcomes and Program Educational Objectives.

Department: An academic entity that conducts relevant curricular and co-curricular activities, involving both teaching and non-teaching staff, and other resources in the process of study for a degree.

Detention: Student who does not obtain minimum prescribed attendance/credits shall be detained in that semester.

Elective Course: A course that can be chosen from a set of courses. An elective can be Professional Elective and/or Open Elective.

Evaluation: Evaluation is the process of judging the academic performance of the student in her/his courses. It is done through a combination of continuous internal examinations and semester end examinations.

Grade: It is an index of the performance of the students in a said course. Grades are indicated by alphabets.

Grade Point: It is a numerical weight allotted to each letter grade on a 10 - point scale.

Institute: Means **Srinivasa Ramanujan Institute of Technology**, Ananthapuramu unless indicated otherwise by the context.

Massive Open Online Courses (MOOC): MOOC inculcate the habit of self-learning. MOOC courses would be additional choices in all the elective group courses.

Minor: Minor are coherent sequences of courses which may be taken in addition to the courses required for the B. Tech degree.

Pre-requisite: A specific course or course, the knowledge of which is required to complete before student register another course at the next grade level.

Professional Elective: It indicates a course that is discipline centric. An appropriate choice of minimum number of such electives as specified in the program will lead to a degree with specialization.

Program: UG Degree Program Bachelor of Technology (B. Tech); PG degree program: Master of Technology (M. Tech).

Program Educational Objectives: The broad career, professional and personal goals that every student will achieve through a strategic and sequential action plan.

Program Outcomes: The essential skill sets that need to be acquired by every student during her/his program of study. These skill sets are in the areas of employability, entrepreneurial, social and behavioural.

Project work: It is a design or research-based work to be taken up by a student during his/her final year to achieve a particular aim. It is a credit-based course and is to be planned carefully by the student.

Registration: Process of enrolling into a set of courses in a semester of a program.

Regulations: The regulations, common to all B. Tech programs offered by Institute, are designated as "SRIT Academic Regulations – R20" and are binding on all the stakeholders.

Semester: It is a period of study consisting of 16 to 18 weeks of academic work equivalent to normally 90 working days. Odd semester commences usually in July and even semester in December of every year.

Semester End Examinations: It is an examination conducted for all courses offered in a semester at the end of the semester.

Semester Grade Point Average (SGPA): It is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student.

SRINIVASA RAMANUJAN INSTITUTE OF TECHNOLOGY

ACADEMIC RULES AND REGULATIONS

SRIT-R20

(Effective for the students admitted into I year from the Academic Year 2020-2021 onwards)

1. Programs offered by the Institute:

The programs offered at present as specializations for the B. Tech. course from 2020-2021 are given in Table 1.

Table 1: Programs Offered

S. No.	Name of the Program	Program Code
1	Civil Engineering - CIV	01
2	Electrical and Electronics Engineering - EEE	02
3	Mechanical Engineering - MEC	03
4	Electronics and Communication Engineering - ECE	04
5	Computer Science and Engineering - CSE	05
6	CSE (Data Science) - CSD	32
7	CSE (Artificial Intelligence & Machine Learning) - CSM	33

2. Medium of instruction:

The medium of instruction is **English** for all courses, examinations, seminar presentations and project work. The curriculum will comprise courses of study as given in course structure, in accordance with the prescribed syllabi.

3. Minimum Qualification for Admission:

A candidate seeking admission to the first semester of the eight semester B. Tech. Degree Program should have passed the Intermediate Examination of the Board of Intermediate Education of Andhra Pradesh with Mathematics and Physical Sciences (Physics and Chemistry) as optional courses or any other equivalent examination thereto recognized by Jawaharlal Nehru Technological University Anantapur, Ananthapuramu / Govt. of Andhra Pradesh, as per AICTE guidelines.

For admissions into the II Year I Semester of B. Tech Degree Program under lateral entry scheme, a candidate should have passed diploma in the respective branch of study as per AICTE guidelines.

4. Structure of the Program:

Every Program will have a curriculum consisting of Foundation Courses, Core Courses, Elective Courses, Theory Courses, Laboratory Courses, Design and Drawing Courses, Project Work, Internship & Mandatory Courses which are classified as shown in Table 2. The list of elective courses may also include courses from allied discipline.

There shall be mandatory **Student Induction Program** for freshers, with a three-week duration before the commencement of first semester. Physical activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Department/Branch & Innovations etc., shall be included in the guidelines issued by AICTE.

Table 2: Category wise distribution of credits

S. No.	Name of the Program	Breakup of Credits(APSCE)	Breakup of Credits(AICTE)
1	Humanities and Social Sciences (HSMC) including Management Courses.	10.5*	12*
2	Basic Science Courses (BSC) (Mathematics, Physics and Chemistry)	21*	25*
3	Engineering Science Courses (ESC) (Workshop, Drawing, Basics of Electrical / Electronics / Mechanical/ Computer Engineering)	24*	24*
4	Professional Core Courses (PCC)	51*	48*
5	Professional Electives Courses (PEC)	15*	18*
6	Open Elective Courses (OEC)	12*	18*
7	Internship, Project Work, Seminar (PROJ)	16.5*	15*
8	Mandatory Courses (NCMC)	Non-Credit	Non-Credit
9	Skill Oriented Courses (SOC)	10	--
Total Credits		160	160

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

5. Semester Structure:

Each academic year is divided into TWO semesters (one odd + one even). Each semester shall be of 21 weeks duration and this period includes time for registration of courses, course work, examination preparation, and conduct of examinations. A sample Academic calendar is presented in Table 3.

Table 3: A Sample Academic Calendar

Semester	Schedule	Duration
First Semester (21 Weeks)	I Spell Instruction Period	8 Weeks
	Continuous Internal Examinations - I	1 Week
	II Spell Instruction Period	8 Weeks
	Continuous Internal Examinations -II	1 Week
	Preparation and Practical Exams	1 Week
	Semester End Examinations	2 Weeks
Semester Break, Regular/Supple. Exams		2 Weeks
Second Semester (21 Weeks)	I Spell Instruction Period	8 Weeks
	Continuous Internal Examinations -I	1 Week
	II Spell Instruction Period	8 Weeks
	Continuous Internal Examinations -II	1 Week
	Preparation and Practical Exams	1 Week
	Semester End Examinations	2 Weeks
Summer Vacation, Regular/Supple. Exams		8 Weeks
Total		52 Weeks

Apart from the regular semester end examinations, the college will also schedule and conduct supplementary examinations for all courses for the benefit of students

with backlogs. Such students who are writing supplementary examinations as supplementary candidates, may have to write more than one examination per day. Instant examination for VIII semester courses will be conducted only for the benefit of those outgoing students who failed or who are absent for final semester exams. The instant exam will be conducted normally within one month of the announcement of the final semester revaluation results.

6. Credit Assignment:

Choice Based Credit System (CBCS) provides choice for students to select from the prescribed courses. Each course is assigned certain number of credits as shown in Table 4.

Table 4: Credits for various courses

Type of Course	Semester	
	Periods	Credits
Theory (Lecture/Tutorial)	02 / Week	02
	03 / Week	03
	04 / Week	04
Practical (Laboratory/Field Work)	02 / Week	01
	03 / Week	1.5
	04 / Week	02
Skill Oriented Course	(2T) or (1T + 2P) / Week	2
Summer Internship	2 Months or 8 Weeks	1.5
Industrial/Community/Research Internship	2 Months or 8 Weeks	3
Non-Credit Mandatory Courses	02 / Week	0
Major Project	6 Months or 24 Weeks	12

Note:

- Summer Internship for 2 months is mandatory after second year, and to be evaluated during V semester.
- The concerned Board of studies can assign tutorial hours to such courses wherever it is necessary, but without change in the total number of credits already assigned for semester.
- Industrial/Community/Research Internship for 2 Months is mandatory after third year, and to be evaluated during VII semester.
- During Project period the student is supposed to report the Internal Departmental Committee periodically.

The curriculum is designed for every program so that the total credits will be 160 (121 for lateral-entry students). To become eligible for the award of degree, every student shall earn all the credits of 160 (121 for lateral-entry students) specified in the curriculum of the program.

7. Evaluation Methodology:

The performance of the students in each semester shall be evaluated course wise for 100 marks. The breakup of marks between Continuous Internal Assessment (**CIA**) and the Semester End Examination (**SEE**), and the mode of assessments for various courses are given in Table 5. A student has to secure not less than 35% of marks in the semester end examination and minimum 40% of marks in the sum

total of internal and semester end examination marks to earn the credits allotted to each course. Detailed guidelines for continuous evaluation shall be planned by concerned combined BOS of the Department.

Table 5: Evaluation Pattern

S. No.	Type of the Course	Marks	
		CIA	SEE
1	Theory	40	60
2	Practical	40	60
3	Skill Oriented Course	100	--
4	Mandatory Non-Credit Courses	40	--
5	Summer Internship	100	--
6	Industrial/Community/Research Internship	100	--
7	Major Project	80	120

Theory Courses:

The performance of a student in each theory course shall be evaluated for maximum of 100 marks. The distribution shall be 40 marks for Continuous Internal Assessment and 60 marks for the Semester End Examination.

Continuous Internal Assessment (CIA): Continuous Internal Assessment (CIA) includes two components; Continuous Internal Evaluation (CIE) and Continuous Alternative Assessment (CAA).

- i. **Continuous Internal Evaluation (CIE):** For each theory course, during the semester, there shall be two CIEs. Each CIE will be evaluated for 30 marks. The first CIE will be conducted for around 50% of the syllabus and the second CIE will be conducted for the remaining syllabus. Final or consolidated CIE marks will be arrived by considering the marks secured by the student in both the CIEs with 80% weightage given to the better CIE and 20% to the other.

The duration of CIE examination is 120 minutes.

There shall be 4 questions and all are compulsory.

- a. Question 1 contains 3 short answer questions from each unit with equal weightage for a total of 6 marks. The student has to answer all of them.
- b. Questions 2-4 contains 3 either/ or type questions from each unit with equal weightage of 8 marks.
- c. If the student is absent for the CIE examination, no re-exam shall be conducted and marks for that examination shall be considered as zero.

- ii. **Continuous Alternative Assessment (CAA):** For each theory course, during the semester, there shall be two CAAs. Each CAA will be evaluated for 10 marks. The first CAA will be conducted for around 50% of the syllabus and the second CAA will be conducted for the remaining syllabus. Final or consolidated CAA marks will be arrived by considering the average of marks secured by the student in both the CAAs.

Respective course coordinator has to evaluate CAAs through Assignment or any other such evaluation methods depending on the nature of the course. The course coordinator will announce the mode of the CAA to the respective class at the beginning of the course. It is responsibility of the course coordinator and Head of the department to maintain the complete record of CAAs and its evaluation.

The final marks for CIA (for 40 marks) = Consolidated CIE marks (for 30 marks) + Consolidated CAA marks (for 10 marks)

The final CIA marks shall be rounded off to next integer in case of any fraction.

Note: Faculty should obtain the prior approval from the BOS Chairman of the respective department regarding the mode of alternative assessment and the evaluation criterion.

Semester End Examinations: End examination of theory courses shall have the following pattern:

- a. There shall be 6 questions and all questions are compulsory.
- b. Question 1 shall contain 5 compulsory short answer questions for a total of 10 marks such that each question carries 2 marks. There shall be 1 short answer questions from each unit.
- c. In each of the questions from 2 to 6, there shall be either/or type questions of 10 marks each. Student shall answer any one of them.
- d. The questions from 2 to 6 shall be set by covering one unit of the syllabus for each question.

End examination of theory courses consisting of two parts of different courses, for Example: Electrical & Mechanical Technology shall have the following pattern:

- a. Question paper shall be in two parts viz., Part A and Part B with equal weightage.
- b. In each part, there shall be 3 either-or type questions for 10 marks each.
- c. The answers for Part A and Part B shall be written in two separate answer books.

Practical Courses:

The performance of a student in each practical course shall be evaluated for maximum of 100 marks. The distribution shall be 40 marks for Continuous Internal Assessment and 60 marks for the Semester End Examination.

Continuous Internal Assessment: CIA shall be evaluated for 40 marks of which with 10 marks for Day-to-day work, 10 marks for record and 20 marks for internal practical exam & viva-voce.

In a practical course consisting of two parts (Eg: Electrical & Mechanical Technology Lab), CIA shall be evaluated for 40 marks in each part and final CIA marks shall be arrived by considering the **average of marks** obtained in two parts. The final CIA marks shall be rounded off to next integer in case of any fraction.

Semester End Examination: The Semester End Examination shall be conducted for 60 marks by the concerned laboratory teacher and a senior expert in the course from the same department and/or from another institute nominated by the Principal. In a practical course consisting of two parts (Eg: Electrical & Mechanical Technology Lab), the semester end examination shall be conducted for 30 marks in each part.

Design/Drawing/Graphics/Estimation Courses:

Continuous Internal Assessment: For the course having design and/or drawing, such as Engineering Drawing, the CIA shall be evaluated for 40 marks. Day-to-day work shall be evaluated for 10 marks by the concerned course teacher based on the reports/submissions prepared in the class. And there shall be two CIEs in a semester for duration of 120 minutes each for 30 marks. The final CIE marks will be arrived by considering of 80% weightage given to the better CIE marks and 20% for the other. The CIE shall contain 3 either or type of questions of equal weightage of 10 marks. The sum of day-to-day evaluation and the CIE will be the final CIA marks for the course. The final CIA marks shall be rounded off to next integer in case of any fraction.

Semester End Examinations: The end examination pattern for Engineering Graphics/Drawing, shall consists of 5 questions, either/or type, of 12 marks each. However, the Semester End Examination pattern for other courses related to design/estimation shall be as per the instructions by Board of Studies.

Mandatory Non-Credit Courses:

Courses like Environmental Sciences, Universal Human Values, Ethics, Indian Constitution, Essence of Indian Traditional Knowledge etc., shall be included in the curriculum as non-credit mandatory courses. Environmental Sciences is to be offered compulsorily as mandatory course for all branches. The evaluation of Mandatory non-credit courses is through CIA for 40 marks only as per 7.1. There shall be no SEE.

However, attendance in such course shall be considered while calculating aggregate attendance and student shall be declared to have passed the mandatory course only when he/she secures 40% or more marks in the consolidated CIA.

Student failing to secure 40% of the CIA marks shall register for the equivalent MOOCs course or shall appear for reassessment tests to be conducted by the teacher and obtain 40%. No letter grades shall be awarded for Mandatory non-credit courses.

Major Project:

In the final semester, the student should mandatorily undergo internship and parallely he/she should work on a project with well-defined objectives. At the end of the semester the candidate shall submit an internship completion certificate and a project report. A student shall also be permitted to submit project report on the work carried out during the internship.

Out of a total of 200 marks for the Major Project, 80 marks shall be for Continuous Internal Assessment and 120 marks for the Semester End Examination (Viva-voce).

The Viva-Voce shall be conducted by a committee consisting of HOD, Project Supervisor and an External Examiner nominated by the Principal. The evaluation of project work shall be conducted at the end of the VIII semester. The CIA shall be evaluated by the departmental committee (Head of the Department, two senior faculty members of the department and Supervisor), based on two seminars given by each student on the topic of his/her project. The SEE of the major project shall be evaluated with an external examiner.

A student shall acquire 12 credits assigned to the Major Project, when he/she secures 40% or more marks both in Continuous Internal Assessment and Semester End Examination. In case, a student fails to secure the minimum required marks, such student has to register and reappear before the committee formed by the Head of the Department for revaluation.

Massive Open Online Courses (MOOCs):

There shall be Five (05) Professional Elective courses and Four (04) Open Elective courses. All the Professional & Open Elective courses shall be offered for 03 credits, wherever lab component is involved it shall be (2-0-2) and without lab component it shall be (3-0-0). If a course comes with a lab component, that component has to be cleared separately. All Open Electives are offered to students of all branches in general. However, a student shall choose an open Elective from the list in such a manner that he/she has not studied the same course in any form during the Programme.

A student shall be permitted to pursue up to a maximum of Two (2) Elective courses in under MOOCs during the Programme. Student shall be permitted to pursue two MOOCs courses in place of two electives in Seventh semester. Each of the courses must be of minimum 12 weeks in duration (3 Credit Course each). Attendance will not be monitored for MOOCs. Student has to pursue and acquire a certificate for a MOOC only from the organizations/agencies approved by the BOS in order to earn the 3 credits. The Head of the Department shall notify the list of such courses at the beginning of the semester.

Student shall be permitted to pursue two MOOC courses from fifth semester onwards. However credits obtained through MOOCs will be shown against in the appropriate semester.

The college shall invite registration forms from the students at the beginning of the semester for offering professional and open elective courses. There shall be a limit on the minimum and maximum number of registrations based on class/section strength.

The college level committee will allot equivalent grade based on the assessment certificate submitted.

Summer & Industry/Community/Research Internships:

Students shall undergo mandatory Summer & Industry/Community/Research Internships for maximum of six weeks duration at the end of second and third year of Programme respectively.

Curricular Framework for Mandatory Internships:

- a. Two summer internships each with a minimum of six weeks duration, done at the end of second and third years, respectively are mandatory. The internship can be done by the students at local industries, Govt. Organizations, construction agencies, Industries, Hydel and thermal power projects and also in software MNCs.
- b. Evaluation of the summer internships shall be through the departmental committee. A student will be required to submit a summer internship report to the concerned department and appear for an oral presentation before the departmental committee. The report and the oral presentation shall carry 40% and 60% weightages respectively.
- c. The College shall facilitate and monitor the student internship programs. Completion of internships is mandatory, if any student fails to complete internship, he/she will not be eligible for the award of degree. In such cases, the student shall repeat and complete the internship.

Skill Oriented Courses:

There shall be Five (05) Skill-Oriented Courses offered during III to VII semesters. Among the five skill courses, four courses shall focus on the basic and advanced skills related to the domain courses and the remaining one shall be a soft skills course.

Curricular Framework for Skill Oriented:

- a. For skill oriented/skill advanced course, one theory and two practical hours or two theory hours/week may be allotted as per the decision of concerned BOS.
- b. Out of the five skill courses two (2) shall be skill-oriented courses from the same domain and shall be completed in second year. Of the remaining three (3) skill courses, one (1) shall be necessarily be a soft skill course and the remaining two (2) shall be skill- advanced courses either from the same domain or Job oriented skill courses, which can be of inter disciplinary nature.
- c. A pool of interdisciplinary job-oriented skill courses shall be designed by a common Board of studies by the participating departments/disciplines and the syllabus along with the pre requisites shall be prepared for each of the laboratory infrastructure requirements. The list of such courses shall be included in the curriculum structure of each branch of Engineering, so as to enable the student to choose from the list.
- d. The student shall be given an option to choose either the skill courses being offered by the college or to choose a certificate course being offered by industries/Professional bodies/APSSDC or any other accredited bodies as approved by the concerned BOS.
- e. The Board of studies of the concerned discipline of Engineering shall review the skill advanced courses being offered by eligible external agencies and prepare a fresh list every year incorporating latest courses based on industrial demand.
- f. If a student chooses to take a Certificate Course offered by industries/Professional bodies/APSSDC or any other accredited bodies, in lieu of the skill advanced course offered by the Department, the credits shall be awarded to the student upon producing the Course Completion Certificate from the agency/professional bodies as approved by the Board of studies.
- g. If a student prefers to take a certificate course offered by external agency, the department shall mark attendance of the student for the remaining courses in that semester excluding the skill course in all the calculations of mandatory

attendance requirements upon producing a valid certificate as approved by the concerned Board of Studies, the student is deemed to have fulfilled the attendance requirement of the course and acquire the credits assigned to the course.

- h. A committee shall be formed at the level of the college to evaluate the grades/marks given for a course by external agencies and convert to the equivalent marks/grades and credits. The recommended conversions and appropriate grades/marks are to be approved by the Academic Council.

NCC/NSS/ROTARACT Club/Indian Red Cross Society Activities:

All undergraduate students shall register for NCC/NSS/ROTARACT Club/Indian Red Cross Society activities. A student will be required to participate in an activity for two hours in a week during second and third semesters. Grade shall be awarded as Satisfactory or Unsatisfactory in the mark sheet on the basis of participation, attendance, performance and behavior. If a student gets an unsatisfactory Grade, he/she shall repeat the above activity in the subsequent years, in order to complete the degree requirements.

8. Eligibility for Promotion:

Attendance Requirements in Academics:

- a. A student shall be eligible to appear for semester end examinations if he/she acquires a minimum of 75% of attendance in aggregate of all the courses in a semester.
- b. Condonation 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.
- c. Shortage of Attendance below 65% in aggregate shall in NO CASE be condoned.
- d. A stipulated fee shall be payable towards condonation of shortage of attendance to the Institute.
- e. Students whose shortage of attendance is not condoned in any semester are not eligible to take their semester end examination of that class and their registration shall stand cancelled.
- f. A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester. They may seek readmission for that semester when offered next.
- g. A student is eligible to write the semester end examinations if he acquires a minimum of 40% attendance in each subject & 75% of attendance in aggregate of all the subjects.

Minimum Academic Requirements for Promotion and Award of degree:

The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in section 8.1.

Regular – Fulltime:

- a. A student shall be deemed to have satisfied the minimum academic requirements and earned the credits allotted to each theory, practical, design, drawing course or project if he secures not less than 35% of marks in the semester end examination and a minimum of 40% of marks in the sum total of

the CIA and semester end examination marks taken together. In case of mandatory courses, he/she should secure 40% of the total marks.

- b. A student shall be promoted from first year to second year if he fulfils the minimum attendance requirements.
- c. A student shall be promoted from II year to III year only if he/she fulfils the academic requirement of securing 40% of the credits in the courses that have been studied up to II Year I Semester (i.e., 24 credits) from the following examinations, irrespective of whether the candidate takes the semester end examination or not as per the normal course of study.
 - i. One regular and two supplementary examinations of I Year I Semester.
 - ii. One regular and one supplementary examination of I Year II Semester.
 - iii. One regular examination of II Year I semester.
- d. A student shall be promoted from III Year to IV Year only if he/she fulfils the academic requirements of securing 40% of the credits in the courses that have been studied up to III Year I Semester (i.e., 41 credits) from the following examinations, irrespective of whether the candidate takes the semester end examination or not as per the normal course of study.
 - i. One regular and four supplementary examinations of I Year I Semester.
 - ii. One regular and three supplementary examinations of I Year II Semester.
 - iii. One regular and two supplementary examinations of II Year I Semester.
 - iv. One regular and one supplementary examinations of II Year II Semester.
 - v. One regular examination of III Year I Semester.

And in case a student is detained for want of credits for particular academic year by sections 8.2.1.c and 8.2.1.d above, the student may make up the credits through supplementary examinations and only after securing the required credits he/she shall be permitted to join in the III Year or IV Year as the case may be.

- e. A student shall register and put-up minimum attendance in all 160 credits and earn all the 160 credits.
- f. Students who fail to earn 160 credits as indicated in the course structure within 8 academic years from the year of their admission shall forfeit their seat in B. Tech. Course and their admission shall stand cancelled.

Lateral Entry Scheme:

- a. A student shall be deemed to have satisfied the minimum academic requirements and earned the credits allotted to each theory, practical, design, drawing course or project if he secures not less than 35% of marks in the semester end examination and a minimum of 40% of marks in the sum total of the CIA and semester end examination marks taken together. In case of mandatory courses, he/she should secure 40% of the total marks.
- b. A student shall be promoted from II Year to III Year if he fulfils the minimum attendance requirements.

- c. A student shall be promoted from III Year IV Year only if the student fulfils the academic requirements of securing 40% of credits from the following examinations (i.e., 25 credits), irrespective of whether the candidate takes the end examination or not as per the normal course of study.
 - i. One regular and two supplementary examinations of II Year I Semester.
 - ii. One regular and one supplementary examinations of II Year I Semester.
 - iii. One regular examination of III Year I Semester.
- d. And in case if student is already detained for want of credits for particular academic year, the student may make up the credits through supplementary exams of the above exams before the commencement of IV Year I Semester class work of next year.
- e. A student shall register and put-up minimum attendance in all 121 credits and earn all the 121 credits.
- f. Students who fail to earn 121 credits as indicated in the course structure within 6 academic years from the year of their admission shall forfeit their seat in B. Tech. Course and their admission shall stand cancelled.

9. Gap Year:

Gap Year – concept of Student Entrepreneur in Residence is introduced and outstanding students who wish to pursue entrepreneurship are allowed to take a break of one year at any time after I/II/III Year to pursue entrepreneurship full time. This period shall be counted for the maximum time for graduation. An evaluation committee at university level shall be constituted to evaluate the proposal submitted by the student and the committee shall decide on permitting the student for availing the Gap Year.

10. Maximum Period for Completion of Program:

The normal duration of B. Tech program shall be four academic years (Three academic years in case of Lateral Entry Scheme). The maximum period which a student can take to complete a B. Tech program shall be double the normal duration of the program, i.e., eight years (excluding period of Gap Year) for regular and six years (excluding period of Gap Year) for lateral entry students reckoned from the commencement of the semester to which the student was first admitted to the program.

A student is required to complete the B. Tech Program of study satisfying the attendance and academic/credit requirements in all the eight semesters of the course within a period of eight (six in case of lateral entry) academic years (excluding period of Gap Year) from the year of admission, failing which he/she shall be declared ineligible to pursue B. Tech degree course. Completing the program of study shall mean not only satisfying the attendance and academic/credit requirements but also passing of all the courses and earning the credits prescribed in the curriculum within the respective stipulated period.

11. Honors/Minors:

Under graduate Degree with Honors/Minor shall be issued by the University to the students who fulfill all the academic eligibility requirements for the B. Tech program and Honors/Minor program. The objective is to provide additional learning opportunities to academically motivated students.

Curricular Framework for Honors Programme:

- a. Students of any Department/Discipline are eligible to opt for Honors Programme offered by the same Department/Discipline.
- b. A student shall be permitted to register for Honors program at the beginning of 4th semester provided that the student must have acquired a minimum of 8.0 SGPA upto the end of 2nd semester without any backlogs. In case of the declaration of the 3rd semester results after the commencement of the 4th semester and if a student fails to score the required minimum of 8 SGPA, his/her registration for Honors Programme stands cancelled and he/she shall continue with the regular Programme.
- c. Students can select the additional and advanced courses from their respective branch in which they are pursuing the degree and get an honors degree in the same. e.g. If a Mechanical Engineering student completes the selected advanced courses from same branch under this scheme, he/she will be awarded B. Tech. (Honors) in Mechanical Engineering.
- d. In addition to fulfilling all the requisites of a Regular B. Tech Programme, a student shall earn 20 additional credits to be eligible for the award of B. Tech (Honors) degree. This is in addition to the credits essential for obtaining the Under Graduate Degree in Major Discipline (i.e. 160 credits).
- e. Out of which, 15 credits can be obtained by pursuing 5 theory courses (each of 3 credits) either through MOOCs (maximum of three only) (as listed by the BOS time to time) or permitted to choose from professional elective courses those he/she has not studied in any form during the Programme. Remaining 5 credits can be obtained by carrying out a mini project in the concerned branch of Engineering.
- f. The Evaluation pattern of theory courses will be similar to the regular program evaluation. The mini project shall be evaluated by the committee consisting of Head of the department, Supervisor and External examiner. Students aspiring for Honors degree must register in V semester only. Student may register for mini project from V semester onwards and complete the same before VIII semester.
- g. It is the responsibility of the student to acquire/complete prerequisite before taking the respective course. The courses offered in each pool shall be domain specific courses and advanced courses.
- h. The concerned BoS shall decide on the minimum enrolments for offering Honors program by the department. If minimum enrolments criteria are not met then the students shall be permitted to register for the equivalent MOOCs as approved by the concerned Head of the department in consultation with BoS.
- i. Each pool can have theory as well as laboratory courses. If a course comes with a lab component, that component has to be cleared separately. The concerned BoS shall explore the possibility of introducing virtual labs for such courses with lab component.
- j. MOOCs must be of minimum 12 weeks in duration. Attendance will not be monitored for MOOCs. Students have to acquire a certificate from the agencies

approved by the BOS with grading or marks or pass/fail in order to earn 3 credits. If the MOOCs is a pass/fail course without any grades, the grade to be assigned will be as decided by the university/academic council.

- k. The concerned BoS shall also consider courses listed under professional electives of the respective B. Tech programs for the requirements of B. Tech (Honors). However, a student shall be permitted to choose only those courses that he/she has not studied in any form during the Programme.
- l. If a student drops or is terminated from the Honors program, the additional credits so far earned cannot be converted into free or core electives; they will remain extra. These additional courses will find mention in the transcript (but not in the degree certificate). In such cases, the student may choose between the actual grade or a "pass (P)" grade and also choose to omit the mention of the course as for the following: All the courses done under the Minors will be shown in the transcript. Courses which are dropped under the Minor will not be shown in the transcript.
- m. In case a student fails to meet the CGPA requirement for Degree with Honors at any point after registration, he/she will be dropped from the list of students eligible for Degree with Honors and they will receive regular B. Tech. Degree only. However, such students will receive a separate grade sheet mentioning the additional courses completed by them.
- n. Honors must be completed simultaneously with a major degree program. A student cannot earn Honors after he/she has already earned bachelor's degree.

Curricular Framework for Minor Programme:

- a. Students who are desirous of pursuing their special interest areas other than the chosen discipline of Engineering may opt for additional courses in minor specialization groups offered by a department other than their parent department. For example, If Mechanical Engineering student selects subjects from Civil Engineering under this scheme, he/she will get Major degree of Mechanical Engineering with minor degree of Civil Engineering.
- b. Student can also opt for Industry relevant tracks of any branch to obtain the Minor Degree, for example, a B. Tech Mechanical student can opt for the industry relevant tracks like Data Mining track, IOT track, Machine learning track etc.
- c. The BOS concerned shall identify as many tracks as possible in the areas of emerging technologies and industrial relevance / demand. For example, the minor tracks can be the fundamental courses in CSE, ECE, EEE, CIV, MEC etc. or industry tracks such as Artificial Intelligence (AI), Machine Learning (ML), Data Science (DS), Robotics, Electric vehicles, Robotics, VLSI etc.
- d. The list of disciplines/branches eligible to opt for a particular industry relevant minor specialization shall be clearly mentioned by the respective BOS.
- e. There shall be no limit on the number of programs offered under Minor. The University/Institution can offer minor programs in emerging technologies based on expertise in the respective departments or can explore the possibility of collaborating with the relevant industries/agencies in offering the program.
- f. The concerned BOS shall decide on the minimum enrolments for offering Minor program by the department. If a minimum enrolments criterion is not met, then the students may be permitted to register for the equivalent MOOCs as approved by the concerned Head of the department in consultation with BOS.
- g. A student shall be permitted to register for Minors program at the beginning of

- 4th semester subject to a maximum of two additional courses per semester, provided that the student must have acquired 8 SGPA (Semester Grade point average) up to the end of 2nd semester without any history of backlogs. It is expected that the 3rd semester results may be announced after the commencement of the 4th semester. If a student fails to acquire 8 SGPA up to 3rd semester or failed in any of the courses, his registration for Minors program shall stand cancelled. An SGPA of 8 has to be maintained in the subsequent semesters without any backlog in order to keep the Minors registration active.
- h. A student shall earn additional 20 credits in the specified area to be eligible for the award of B. Tech degree with Minor. This is in addition to the credits essential for obtaining the Under Graduate Degree in Major Discipline (i.e. 160 credits).
 - i. Out of which, 18 credits can be obtained by pursuing 6 theory courses (each of 3 credits) either through MOOCs (maximum of three only) (as listed by the BOS time to time). Remaining 2 credits can be obtained by carrying out a mini project in the concerned branch of Engineering offering minors course.
 - j. The Evaluation pattern of theory courses will be similar to the regular program evaluation. The mini project shall be evaluated by the committee consisting of Head of the department, Supervisor and External examiner. Students aspiring for Minors degree must register in V semester only. Student may register for mini project from V semester onwards and complete the same before VIII semester.
 - k. Student can opt for the Industry relevant minor specialization as approved by the concerned departmental BOS. Student can opt the courses from Skill Development Corporation (APSSDC) or can opt the courses from an external agency recommended and approved by concerned BOS and should produce course completion certificate. The Board of studies of the concerned discipline of Engineering shall review such courses being offered by eligible external agencies and prepare a fresh list every year incorporating latest skills based on industrial demand.
 - l. A committee should be formed at the level of College/Universities/department to evaluate the grades/marks given by external agencies to a student which are approved by concerned BOS. Upon completion of courses the departmental committee should convert the obtained grades/marks to the maximum marks assigned to that course. The controller of examinations can take a decision on such conversions and may give appropriate grades.
 - m. If a student drops (or terminated) from the Minor program, they cannot convert the earned credits into free or core electives; they will remain extra. These additional courses will find mention in the transcript (but not in the degree certificate). In such cases, the student may choose between the actual grade or a "pass (P)" grade and also choose to omit the mention of the course as for the following: All the courses done under the dropped Minors will be shown in the transcript. None of the courses done under the dropped Minor will be shown in the transcript.
 - n. In case a student fails to meet the CGPA requirement for B.Tech degree with Minor at any point after registration, he/she will be dropped from the list of students eligible for degree with Minors and they will receive B. Tech degree only. However, such students will receive a separate grade sheet mentioning the additional courses completed by them.
 - o. Minor must be completed simultaneously with a major degree program. A student cannot earn the Minor after he/she has already earned bachelor's

degree.

12. Award of Grades:

After each course is evaluated, the marks obtained in each course will be converted to a corresponding letter grade as given in below Table 6, depending on the range in which the marks obtained by the student fall.

Table 6: Structure of Grading of Academic Performance

Range in which the % of marks in the course fall	Grade	Grade points Assigned
≥ 90	S (Outstanding)	10
80-89	A (Excellent)	9
70-79	B (Very Good)	8
60-69	C (Good)	7
50-59	D (Average)	6
40-49	E (Below Average)	5
< 40	F (Fail)	0
Absent	Ab (Absent)	0

- A student obtaining Grade 'F' or Grade 'Ab' in a course shall be considered failed and will be required to reappear for that course when it is offered the next supplementary examination.
- For mandatory courses, "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

12.1 Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

- The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.,

$$\text{SGPA} = \Sigma (C_i \times G_i) / \Sigma C_i$$

Where, C_i is the number of credits of the i^{th} subject and G_i is the grade point scored by the student in the i^{th} course.

- The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.,

$$\text{CGPA} = \Sigma (C_i \times S_i) / \Sigma C_i$$

Where " S_i " is the SGPA of the i^{th} semester and C_i is the total number of credits up to that semester.

- c. Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.
- d. While computing the SGPA the subjects in which the student is awarded Zero grade points will also be included.
- e. **Grade Point:** It is a numerical weight allotted to each letter grade on a 10-point scale.
- f. **Letter Grade:** It is an index of the performance of students in a said course. Grades are denoted by letters A+, A, B, C, D, E and F.
- g. As per AICTE regulations, conversion of CGPA into equivalent percentage as follows:

$$\text{Equivalent Percentage} = (\text{CGPA} - 0.50) \times 10$$

13. Award of Class:

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of B.Tech. degree, he/she shall be placed in one of the following four classes as presented in the Table 7.

Table 7: Award of Class

Class Awarded	CGPA Secured
First Class with Distinction	≥ 7.5
First Class	$\geq 6.5 < 7.5$
Second Class	$\geq 5.5 < 6.5$
Pass Class	$\geq 4.0 < 5.5$

14. With holding of Results:

The result of a candidate shall be withheld if:

- a. He/she has not cleared any dues to the Institution/ Hostel/ University.
- b. A case of disciplinary action against him/her is pending disposal.

15. Transitory Regulations:

Candidates who have been detained for want of attendance/lack of credits or who wish to repeat the same semester or avail temporary withdrawal or avail gap year are eligible for readmission into the respective semester and shall be governed by the curriculum and academic regulations in force at the time of re-joining.

16. Ragging:

Ragging of any kind is strictly prohibited. A Student who indulges in ragging shall be punished as per the provisions of the Ragging Act.

17. Rules of Discipline

- a. Use of mobile phones in the campus is strictly prohibited.
- b. Students shall behave and conduct themselves in a dignified and courteous manner on the campus/Hostels.
- c. Students shall not bring outsiders to the institution or hostels.
- d. Students shall not steal, deface, damage or cause any loss to the Institution property.
- e. Students shall not collect money either by request or coercion from others within the campus or hostels.

- f. Students shall not resort to plagiarism of any nature/extent. Use of material, ideas, figures, code or data without appropriate acknowledgement or permission of the original source shall be treated as cases of plagiarism. Submission of material, verbatim or paraphrased, that is authored by another person or published earlier by oneself shall also be considered as cases of plagiarism.
- g. Use of vehicles by the students inside the campus is prohibited.
- h. Any conduct which leads to lowering the esteem of the institution is prohibited.
- i. Any student exhibiting prohibited behaviour shall be suspended from the institute. The period of suspension and punishment shall be clearly communicated to the student. The student shall lose the attendance for the suspended period.
- j. Dress Code:
 - i. Boys: All the boy students should wear formal dresses (Always be tucked in) along with shoe. Wearing T-shirts and other informal dresses on the campus is strictly prohibited.
 - ii. Girls: All the girl students shall wear churidar with dupatta/ saree.

18. Amendment of Regulations:

The college may change or amend the academic regulations or syllabi at any time and the changes or amendments shall be made applicable to all the students on rolls with effect from the dates notified by the college.

19. General Instructions:

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

- a. Malpractices rules-nature and punishments are appended.
- b. Where the words "he", "him", "his", occur in the regulations, they also include "she", "her", "hers", respectively.
- c. In the case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Principal is final.

20. Punishments for Malpractice cases - Guidelines

The examinations committee may take the following guidelines into consideration while dealing with the suspected cases of malpractice reported by the invigilators/squad members etc; during end examinations. The punishment may be more severe or less severe depending on the merits of the individual cases present Table 8.

Table 8: Award of Class

S. No.	Nature of Malpractices/Improper conduct	Punishment
	<i>If the candidate</i>	
1.	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory	Expulsion from the examination hall and cancellation of the performance in that subject only.

	or practical) in which he is 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)	
2.	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 is registered against him.
3.	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 candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the Controller of Examinations.
4.	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 that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
5.	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 examinations of the subjects of that

		semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
6.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks	Cancellation of the performance in that subject.
7.	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 or 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 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.	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.
8.	Leaves the exam hall taking away answer script or intentionally tears off 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 examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end

		examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
9.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects 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.
10.	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.	Student of the college 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. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
11.	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 and shall not be permitted for the remaining examinations of the subjects of that semester/year.
12.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
13.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the college academic council for further action to award suitable punishment.	
14.	Malpractice cases identified during sessional examinations will be reported to the internal examination committee to award suitable punishment.	