RULES AND REGULATIONS OF UG ACADEMIC PROGRAMMES -2024

Estd: 2001

RNS INSTITUTE OF TECHNOLOGY

Autonomous Institution Affiliated to VTU

www.rnsit.ac.in

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VISION

Building RNSIT into a World Class Institution

MISSION

To impart high quality education in Engineering, Technology and Management with a difference, enabling students to excel in their career by

➢ **Attracting quality Students and preparing them with a strong foundation in fundamentals so as to achieve distinctions in various walks of life leading to outstanding contributions**

➢ **Imparting value based, need based, choice based and skill based professional education to the aspiring youth and carving them into disciplined, World class Professionals with social responsibility**

➢ **Promoting excellence in Teaching, Research and Consultancy that galvanizes academic consciousness among Faculty and Students**

➢ **Exposing Students to emerging frontiers of knowledge in various domains and make them suitable for Industry, Entrepreneurship, Higher studies, and Research & Development**

➢ **Providing freedom of action and choice for all the Stakeholders with better visibility**

I.   Preamble

RNS Institute of Technology (RNSIT) was established in the year 2001 under the aegis of R N Shetty Trust, headed by Late Dr. R N Shetty, who was a well-known industrialist and a great philanthropist. The Institution was established with a sole purpose of imparting quality education in Engineering, Technology and Management.

RNSIT is affiliated to Visvesvaraya Technological University (VTU), recognized by Government of Karnataka (GoK), Accredited by National Assessment of Accreditation Council (NAAC) with 'A+' grade for the duration of five years (2023-2028). Being one of the premier engineering colleges in the country, RNSIT is marching towards placing itself in the global map by excelling in academics and placements.

RNSIT was granted Autonomous status by University Grants Commission (UGC) in the year 2023 and the same was approved by VTU and Government of Karnataka in 2024. The academic autonomy enables the Institution to derive full benefit and be able to meet the 21st century challenges faced by the technical education system in the country like:

(i) Ever increasing influence of science and technology and their impact on human society.
(ii) Shrinking time scale of new developments and the high rate of obsolescence in the older practices.
(iii) Penetration of Information Technology in all sectors of human activity and economic development.
(iv) Service sector becoming a major avenue for employment of technical professionals and also for economic gains.
(v) Emergence of knowledge as a key driver for the progress of nation and for increasing their influence on the world scenario.

The Institution aims to produce 21st century engineers to convert these challenges into opportunities by enabling them to have:

- Strong foundation in the basics of mathematics, science and engineering discipline.
- Command over the chosen area of specialization.
- Capacity to apply the professional knowledge and skills acquired.
- Competence to learn a subject on one's own without major external help.
- Expertise in analysis, design, modelling and simulation of complex systems.
- Scaling up mass production, system operation and maintenance.
- Estimation of costs and time factors in an assignment.
- Ability for rational, logical and objective thinking.

- Skill in personnel management and human relations, and
- Leadership qualities including spirit of tolerance, patience and team work.

The Institution also aims to:

(a) Make full use of the academic freedom given to it by the University with responsibility and accountability.
(b) Use this opportunity to demonstrate its capabilities and innovative skills, to become visible in the higher education system and,
(c) Gain the confidence and command respect from all its stake holders, especially students, alumni, parents, recruiters and the society at large.

In view of the above, the academic regulations for the batches coming under autonomous purview are framed based on the guidelines from VTU, incorporating logical approach and with an idea of flexibility, yet not compromising on the quality of the system.

II. Short Title and Commencement

A) The regulations listed in the following are common for all UG programmes offered by the Institution and are based on the Guidelines for Implementation of Academic Autonomy at Colleges (Amended-2022) by Visvesvaraya Technological University, Belagavi.

B) The regulations are subject to amendments made by the Academic Council with the approval of the Governing Council of the institution from time to time, and keeping the recommendations of the Board of Studies, Board of Examiners and Controller of Examinations in view.

C) These regulations shall be effective from academic year 2024-25.

III. Definitions / Meanings

- **AICTE:** All India Council for Technical Education.
- **Academic Autonomy:** Freedom granted by the University to the Institution in all aspects of conducting its academic programs for promoting academic excellence.
- **Academic Year:** Refers to the sessions of two consecutive semesters (odd followed by an even) including periods of vacation.
- **Audit Courses:** This means the Knowledge/ Skill enhancing Courses without the benefit of credit for a Course.
- **Autonomous Institution / College:** An Institution/College notified as an autonomous college as per the VTU Autonomous College Statute, 2006.

- **BOS:** Board of Studies.
- **BOE:** Board of Examiners.
- **Branch:** Specialization or discipline of B.E./B.Tech. Degree Program, like Computer Science and Engineering, Mechanical Engineering, Electrical and Electronics Engineering, and Electronics and Communication Engineering, etc.
- **COE:** Controller of Examinations.
- **Choice Based Credit System (CBCS):** Refers to customizing the Course work, through Core, Elective, and skill-based Ability Enhancement Courses to provide the necessary support for the students to achieve their goals.
- **Continuous Internal Evaluation (CIE):** Refers to the evaluation of student's performance in the course during teaching-learning process. CIE shall be done by faculty member teaching the course, and evaluation components shall include tests as mandatory component and any two of the following;
    - ➢ Assignments
    - ➢ Group discussion
    - ➢ Quizzes
    - ➢ Course-specific projects
    - ➢ Case-studies
    - ➢ Field surveys, etc.

  conducted during semester tenure with a weightage for different activities as specified by the Academic Council of the Institution.
- **Course:** Usually referred to as subject and is a component of a Programme. All Courses need not carry the same weightage. The Courses should define learning objectives and learning outcomes. A Course may be designed to comprise lectures/ tutorials/ laboratory work/ fieldwork/ outreach activities/project work/ vocational training/ viva-voce/ seminars/ term papers/assignments/ presentations/ self-study etc., or a combination of some of these.
- **Course Code:** An alphanumeric code used to uniquely identify a course in the programmes offered.
- **Course Evaluation:** This represents the measurement of the impact of the teaching-learning process and offers an opportunity for improving the quality of learning in courses and teaching performance. Course evaluation is done by adopting different methods, such as tests, quizzes, assignments, etc., during the teaching-learning period at the end of some modules or chapters of syllabus contents, and at the end of the semester. While the former part is called Continuous Internal Evaluation (CIE) and the latter part is called Semester End Examination (SEE).
- **Course Registration:** It is a formal registration to Courses of study every semester by every student under the supervision of a mentor (also called Faculty Advisor or

- Counsellor), in the college to maintain proper records. Course Registration is mandatory at the beginning of every semester.

- **Credit:** Refers to 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 hour of lecture or two hours of laboratory/practical Courses/ tutorials/ fieldwork etc., per week.

- **Credit Point:** This is the product of grade point and the number of credits for a course.

- **Credit Representation:** Refers to the Credit Values for different academic activities considered, as per Table 1. Credits for the project phases, project viva-voce and internship shall be as specified in the Scheme of Teaching and Examinations.

Table 1: Credit Values				
Theory/Lectures (L) (hours/week/sem)	Tutorials (T) (hours/week/sem)	Laboratory/Practical (P) (hours/week/sem)	Credits (L: T: P)	Total Credits
4	0	0	4:0:0	4
3	0	2	3:0:1	4
2	2	2	2:1:1	4
3	0	0	3:0:0	3
2	2	0	2:1:0	3
2	0	2	2:0:1	3
0	0	6	0:0:3	3
2	0	0	2:0:0	2
1	0	0	1:0:0	1
0	0	2	0:0:1	1

- **Cumulative Grade Point Average (CGPA):** This is a measure of the cumulative performance of the student of all semesters and is computed from the second semester onwards. It is a measure of the overall cumulative academic performance of a student over the entire span of the academic programme. CGPA is not an Arithmetic mean, but a weighted mean. It also is a number that lies between 4 and 10. It shall be expressed up to two places after the decimal point.

- **First attempt:** A student is considered to have made first attempt, if he/she has studied in a semester and attended any one of the Semester End Examinations (SEE) of that semester after satisfying attendance and CIE requirements of all the prescribed courses of that semester, and has registered for SEE. Even if the student is absent for all the semester exams after registering for SEE, such an attempt shall also be considered as the first attempt.

- **Grade Card:** Refers to the certificate showing the Grades earned by a student. A Grade Card shall be issued to all the registered students after every SEE. The Grade Card shall have the details of the programme, such as course code, title, number of credits, grades secured, along with SGPA of that semester and CGPA (except for the first semester), earned till that semester.

- **Grade Certificate:** The Grade Certificate has the same format as Grade Card but indicates the month and year of clearing a course, and is issued to a student on demand only.
- **Grade Point (GP):** Refers to a numerical weightage allotted to each Letter Grade on a 10-point scale against a range of percentage of marks secured by students in a course.
- **HOD:** Head of the Department
- **Honours Degree:** A degree awarded along with 'Honours' distinction if the student completes the specified additional number of credits during the regular programme as per the regulations governing Honours Degree Programme. A student admitted to the Programme shall be eligible to register to 'Honours' Programme if he/she fulfills the conditions as per the Regulations governing Honours Degree Programme.
- **Institution / College / RNSIT:** RNS Institute of Technology
- **Lateral Entry:** Diploma students who are admitted to the third semester of the respective programme, based on the qualification at the time of entry.
- **Letter Grade:** Course Letter Grade (or simply grade) is an index of performance of a student in a said course and refers to a qualitative measure of achievement of a student in each course, based on the percentage range of marks secured in CIE and SEE put together or CIE alone. Grades are denoted by letters O, A+, A, B+, B, C, P and F. The rubrics attached to letter grades are as follows: **O**: Outstanding, **A+**: Excellent, **A**: Very Good, **B+**: Good, **B**: Above Average, **C**: Average, **P**: Pass and **F**: Fail. Additional letter grades used under special circumstances are: **DX**: Attendance below 75%, **AU**: Satisfactory in Audit course, **AB**: Absent for the course, **PP**: Passed in Non-credit course, **NP**: Not passed in a Non-credit course, **W**: Withdrawn.
- **Mentor:** A Faculty Advisor allotted by the Principal to guide around 20 students for registration to the courses and progression in the programme.
- **Minor Degree:** A degree along with minors is awarded in a programme if a student completes the required number of credits of another programme as per the Regulations governing the Minor degree programme. A student shall be eligible to register to a Minor Programme if he/she fulfills the conditions as per the Regulations governing Minor degree programme.
- **Multiple-Entry and Multiple-Exit (MEME):** The multiple entries and exit points in the academic programmes would remove rigid boundaries and create new possibilities for students. To facilitate flexible learning within the stipulated period (eight years for regular students and six years for lateral entry students), multiple-entry and multiple-exit options are offered to needy students.
- **Non-Credit Mandatory Courses (NCMC):** In the case of Non-credit Mandatory Courses, students shall attend the classes during the respective semesters to satisfy the attendance requirements as well as CIE requirements. In case, any student fails to

register for the said course/ fails to secure the minimum 40% of the prescribed CIE marks, he/she shall be deemed to have not completed the course. In such a case, the student has to fulfill the requirements during subsequent semester/s to appear for CIE. These courses shall not be considered for CGPA calculation and vertical progression, but completion of the courses shall be mandatory for the award of the degree.

- **Notification:** A notification issued by the concerned statutory officer of the Institution.
- **Passing Standards:** Refers to passing a course only when GP is ≥ 04.
- **Principal:** The Head of the Institution.
- **Programme:** This is an educational programme in a particular stream/ branch of Engineering leading to the award of the Degree. It involves events/activities, comprising of lectures / tutorials / laboratory work / field work / outreach activities / project work / vocational training/viva-voce/ seminars/ internship/assignments/ presentations/ self-study etc., or a combination of some of these.
- **Regular Students:** Students admitted to the first year of the respective programme.
- **Semester:** Refers to one of the two sessions of an academic year, wherein each session will have sixteen weeks duration (with not less than 90 working days) of coursework, followed by exam and announcement of results. The odd and even semesters shall be as per the academic calendar.
- **Semester End Examinations (SEE):** Also, referred to as summative assessment, they are the examinations conducted by the Institution at the end of the semester, as per the schedule announced by Controller of Examinations, approved by Principal.
- **Semester Grade Point Average (SGPA):** It is a measure of Academic performance of a student in a semester. It is the weighted average of the grade points obtained by a student in various courses of the semester. It results in a number between 0 and 10. It shall be expressed up to two places after the decimal point.
- **Statute:** VTU Autonomous College Statute, 2006
- **Supplementary Semester:** Refers to a special academic session of six to eight weeks, exclusively conducted to enable vertical progression of slow learners/repeaters to the higher academic year in the program.
- **Teacher:** A member of the faculty at the levels of Professor, or Associate Professor or Assistant Professor, and includes Adjunct faculty and faculty on a long-term contract of not less than three years.
- **Transcript:** Transcript is the consolidated statement of the academic performance of a student for all the semesters since joining the programme and is generally issued on request to a student, after successful completion of the programme.
- **UGC:** University Grants Commission
- **University / VTU:** Visvesvaraya Technological University, Belagavi

IV. Regulations

24RNBE 1.0. TITLE AND DURATION OF THE PROGRAMME

24RNBE 1.1. The Undergraduate (UG) programme of study, shall be called as the degree of Bachelor of Engineering abbreviated as B. E. followed by specialization indicated within brackets.

24RNBE 1.2. The duration of B.E. degree shall be four academic years, organized in eight semesters, with each semester having the duration of 16-18 weeks, having provision for Multiple-Entry and Multiple-Exit, and award of Honours or Minor degrees.

24RNBE 1.3. The annual academic calendar of events with respect to the programme shall be approved by the Academic Council and notified at least a month before the commencement of each semester. It is mandatory for students/faculty members to strictly adhere to the academic calendar for completion of academic activities. Academic calendar shall be displayed on the Institution's website.

24RNBE 2.0. ACADEMIC ELIGIBILITY FOR ADMISSION

The rules specified in the clauses below shall be followed for admission to B. E. programmes, but the orders issued from the Government/the regulatory bodies from time to time shall prevail.

24RNBE 2.1. Admission Eligibility to 1st year for candidates Passed in second PUC or equivalent:
1) As notified by the Government of Karnataka from time to time.
2) Those students, who have passed a qualifying examination other than second PUC examination of the Pre-University Education Board of Karnataka, have to obtain an eligibility certificate for seeking admission to 1st year B.E. degree programme from the University.

24RNBE 2.2. Admission Eligibility to 2nd year (Lateral Entry) for candidates who have passed 3-year Diploma in Engineering and B. Sc. Degree:
1) As notified by the Government of Karnataka and the University from time to time for admission into 3rd semester of B.E. programme.
2) Those students, who have completed an Engineering Diploma from States other than Karnataka shall submit the Equivalence/Eligibility Certificate issued by Director of Technical Education, Karnataka.

24RNBE 2.3. Qualification earned from Foreign countries

With regard to the qualification earned from foreign countries, an equivalence certificate from the Association of Indian Universities/University is mandatory for admission to B. E. programmes. In case of any dispute about the equivalence in qualification earned from foreign countries, the decision of the University in this regard shall be final and binding on all concerned.

24RNBE 2.4. Additional Requirements:

1) All the Diploma and B. Sc. Degree holders admitted to lateral entry shall also pass any deficit courses as specified by the Academic Council before the completion of the degree.
2) Further, all the Diploma and B. Sc. Degree holder applicants shall also be required to register and pass the non-credit mandatory Mathematics bridge course(s) as specified by Academic Council, within two years after joining the programme.

24RNBE 3.0. CURRICULUM FRAMEWORK AND ACADEMIC PROCESSES

24RNBE 3.1. Semesters-Odd and Even

The Institution follows the Choice Based Credit System and the semester scheme as per the directions of the University. There are two regular semesters and one supplementary semester in an academic year. The semester that begins in August (August to December) is known as the Odd semester and the semester that begins in January (January to May) is known as the Even semester.

24RNBE3.1.1. The break-up of an academic year for implementing the Semester Scheme is given in Table 2 as a typical example. Table 3 and Table 4 show the typical action plan followed during main semesters and supplementary semester.

Table 2: Typical Break-up of Academic Year into Semesters	
Number of Semesters per Year	**Three Semesters;** Two being Main Semesters (Odd, Even) and one being a Supplementary Semester. **Note:** Supplementary Semester is primarily to assist the slow learners and/or repeater students for repeating the courses. However, the College may use this Semester to arrange Add- On Courses for other students and/or for deputing them for Fieldwork and/or internship.
Semester Duration (Weeks)	Main Semesters (Odd, Even):19 weeks each.

Academic Activities (Weeks)	**Main Semester**	
	Registration of courses	**0.5 of a Week**
	Course work	**15.5 Weeks**
	Examination Preparation and Examination	**2.0 Week**
	Declaration of Results	**1.0 Week**
	Total	**19.0 Weeks**

	Inter-Semester Recess: After each Main Semester – 2 to 3 weeks, flexible After Supplementary Semester – 1 to 2 weeks, flexible. **Total:** 6 weeks for slow learners, whereas it shall be 14 weeks for fast learners as they do not attend Supplementary semester. Refer Table-3 and Table-4. **Note:** In each semester, there are various provisions for students like, Registration of courses at the beginning, dropping of courses in the middle and withdrawal from courses towards the end, all being under the faculty mentor's advice.
Examinations	Continuous Internal Evaluation (CIE) and Semester End Examination (SEE) both having equal weightage in the students' performance in Course work/ Laboratory work and other activities. **NOTE:** • If there is no SEE for a course, then the CIE marks alone will be the basis for the determination of letter grade. • The CIE shall be conducted by the Course Instructor throughout a Semester on the dates announced in advance and the results are announced from time to time. This will help the students to decide on Dropping of Courses or Withdrawal from Courses based on their performance and in consultation with their Faculty Advisors. The dates for SEE shall be scheduled by the Institution, through consultation with the University.
Other Items	• Care is taken by the College to ensure that the total number of days for academic work is ≥ 180/year. • Academic schedule prescribed by College is strictly adhered to, for success of the Semester Scheme. • Supplementary Semester is mainly scheduled by the College for conducting Repeat Course for the benefit of slow learners/ repeaters. • Students having satisfactory CIE and attendance but, failed (F-Grade) in SEE, need not register for Course/s and can appear for SEE as and when conducted. • Minimum, Maximum and Average Course loads per Semester are fixed in alignment with University / by approval from the University.

Table 3: Typical Break-up of Main semesters					
Sl. No.	Action Plan	Odd Semester		Even Semester	
1	Registration of courses	2 days **(before the commencement of the semester)**	**Vacation between odd and even semesters**	2 days **(before the commencement of the semester)**	**Vacation after even semester**
2	Course Work	15.5 weeks		15.5 weeks	
3	Examination Preparation holidays	1 week		1 week	
4	Semester End Examination	1.5 weeks		1.5 weeks	
5	Evaluation and Announcement of Results	1 week		1 week	
	Total	**19 weeks**	**2 weeks**	**19 weeks**	**12 weeks**

Table 4: Typical Break-up of Supplementary (Fast-track) semester		
Sl. No.	Action Plan	Supplementary Semester
1	Registration of courses	1 day (The next working day after the announcement of even semester examination results)
2	Course Work*	7.5 weeks
3	Examination preparation holidays	0.5 of a week
4	Semester End Examination	1 week
5	Announcement of Results	1 week
	Total	**10 weeks**

24RNBE 3.2. Curriculum

Every programme has a prescribed course structure which in general terms, is known as the curriculum or the Courses of Study or the Scheme of Teaching and Evaluation. It prescribes all the course/laboratory/other requirements for the degree and sets out the nominal sequence semester wise.

It provides the syllabus and a list of text/reference books (or other learning material sources) for each course. The details of the courses are updated every semester and are made available on the Institution's website. Curriculum shall also include some Online courses including SWAYAM and other MOOC courses, recommended by the respective Department's Board of Studies, approved by Academic council.

It is to be noted that College will conduct a 3-week induction programme for the first year B.E. Students at the beginning of their 1st Semester, as per the requirements of AICTE in its Model UG Curriculum (Feb. 2018).

24RNBE 3.2.1. Choice Based Credit System (CBCS)

1) A certain quantum of academic work measured in terms of credits, is laid down as the requirement for completion of B.E. degree in the different available specialization areas. A student earns credits by satisfactorily completing courses/other academic activities every semester.

2) The credits are distributed semester wise, as prescribed in the Scheme of Teaching and Evaluation for each of the programmes. The courses generally progress in sequences, building competencies as per the course learning outcomes. The positioning of a course indicates certain academic maturity on the part of the students.

3) Some courses do, in addition, may specify a grade/pass/exposure for other courses, offered earlier in the programme, as pre-requisites for the course.

4) Since the Institution follows CBCS, the students shall be offered courses as per Scheme of Teaching and Evaluation, and the students are required to register for the courses of their choice before the beginning of every semester.

5) Students are required to follow the semester wise schedule of courses specified in Scheme of Teaching and Evaluation; they do, however, have freedom to follow alternative schedules to optimize their academic profile with additional courses, keeping the requirements for each course in mind. For students with backlog courses, such rescheduling may even become necessary. Such departures from suggested schedules need to be done very carefully, and always with guidance from the mentor.

24RNBE 3.2.2. Types of Courses

There will be following types of courses in B.E. programmes, namely,

1) Humanities and Social Sciences (HSMC) including Management, Skill Enhancement and Economics. These courses will have 1 to 3 credits per course.

2) Basic Sciences (BSC) including Mathematics, Physics, Biology and Chemistry. These courses will have 2 to 4 credits per course.

3) Engineering Sciences (ESC) including Workshop, Drawing, Basics of Electrical/Civil/Mechanical/Computer Engineering, Materials, and Instrumentation. These courses will have 2 to 4 credits per course.

4) Professional Core Courses (PCC): These are the courses to be compulsorily studied by a student as a core requirement to complete the requirements of a programme in a said discipline of study, and will have 1 to 4 credits per course.

5) Professional Elective Courses (PEC): These are the courses from which a student can choose and study as part of the requirement to complete the programme in a said discipline of study, and will have 2 to 4 credits per course.

6) Open Elective Courses (OEC): These courses are supportive to the

discipline/providing extended scope/ enabling an exposure to some other discipline/domain and they are chosen from the pool of courses and will have 2 to 4 credits per course.

7) Skill Development Courses (SDC): These courses will be nurturing student proficiency skills. These courses are offered to achieve the programme outcomes, not specifically covered by other courses and will have 1 to 3 credits per course.

8) Ability Enhancement Courses (AEC): These are the generic skill courses which are basic and needed to all to ensure progression across all careers, and will have 1 to 2 credits per course.

9) Non-Credit Mandatory Courses (MC): These are courses on peripheral subjects in a programme, wherein familiarity is considered mandatory. A pass is required in these courses to qualify for the award of degree.

10) Mini Project work (MP), Project Work (PW) and Internship (IS) are also considered as courses in the programme. These will have 2, 8 and 10 credits respectively.

24RNBE 3.2.3. Conduction of Courses

The courses mentioned above (24RNBE 3.2.2) may be a combination of Lectures, Tutorials and Practical, with suitable credits assigned to them. All the courses registered by a student under any of the types of the courses as required for the award of the degree shall be considered as heads of passing which shall be Graded according to his/her performance. **The following procedure shall be used for designing and offering the above courses:**

1) The courses for a programme shall be designed within the framework of UGC and AICTE guidelines by the concerned Board of Studies and approved by the Academic Council of the Institution.

2) The number of courses under each type shall be decided as per the AICTE curriculum framework specified under clause 24RNBE 3.4.

3) **Project Work:** Based on the ability/abilities of the student/s and recommendations of the mentor, a disciplinary or an inter-disciplinary major project can be assigned to a group having not more than 4 students. The main project work needs to be taken up within the institute/research laboratory/industry. It is desirable that the outcome of the project work may be published/patented.

4) **Mini Project work:** A mini project is a laboratory/societal/Industry-oriented work that will provide a platform for students to enhance their practical knowledge and skills through the development of small systems/applications based on the ability/abilities of the student/s and recommendations of the

mentor, a disciplinary or an inter-disciplinary mini-project can be assigned to a group having not more than 4 students.

5) **Internship:** The internship is an extended period of work experience undertaken by the students aspiring to supplement their degree with professional development. The students are allowed to prepare themselves for the workplace and develop practical skills. The Internship shall be completed during the period specified in the scheme of Teaching and Evaluation. The Institution shall encourage students to take up, an Interdisciplinary Research Internship or Industry Internship.

With the consent of the internal guide, Head of the Department and Principal, students shall be allowed to carryout the Internship within or outside the state or abroad, provided favorable facilities are available and the student remains regularly in contact with the internal guide. The Institution shall not bear any cost involved in carrying out the Internship by students.

24RNBE 3.2.4. Audit Courses

A student desirous of additional exposure to a course, without the rigors of obtaining a good grade, 'audits' a course. The minimum requirement of attendance for an Audit course is 75%, with any additional requirements as set by the instructor such as the submission of the assignments and minimum performance in some of the in-semester evaluations. Auditing of courses during regular semesters from 3rd semester onwards is permitted under the following conditions:

1) Students with CGPA > 6.0 will be permitted to Audit a course. A course can be audited provided the course is offered in the semester as a credit course for others, and there is no clash in time slots. Prior permission of the Instructor is required.

2) Audit courses would be restricted to a maximum of two courses per student in the entire period of the programme.

3) The course instructor would award the 'AU' grade, if the attendance is satisfactory and additional requirements, as set out by the Course Instructor, are met. If the attendance and performance in additional requirements is not satisfactory, the Instructor will not award a grade. The grade 'AU' does not carry any grade points and therefore does not figure in SGPA/CGPA calculations.

4) The Audit course successfully completed will be reflected in the semester Grade Card and the Transcript as Audit Course.

24RNBE 3.3. Prescribed Number of Credits for the Programme

All courses prescribed by the University, except the Non-credit Mandatory courses, shall have credits and be considered as a head of passing for vertical progression. The credits fixed for the courses are awarded to the students on passing the courses registered by them.

1) The total number of credits to be earned for the award of B.E. degree by students admitted to the first semester of the four-year B.E. programme shall be 160.

2) The total number of credits to be earned for the award of B.E. degree by students admitted under lateral entry scheme to the third semester of four-year B.E. programme shall be 120.

3) A student shall be awarded B.E. degree with Honours or Minor, if he/she earns a minimum of additional 18 credits, satisfying the conditions specified in 24RNBE 7.2 and 24RNBE 7.3.

24RNBE 3.4. Curriculum Framework

The structure of UG programme in Engineering shall have essentially the following (shown in Table 5) categories of courses with the breakup of credits as shown against them. However, minor variations shall be there as per the need of the respective disciplines on approval from Academic Council of the Institution.

Table 5: Credit Break-up for a Programme			
Sl.No.	Category	Credits	% of total credits
1	HS and AE-Humanities and Social Sciences, and Ability Enhancement	17	10.63
2	BSC-Basic Science courses	23	12.50
3	ESC-Engineering Science courses	18	11.25
4	PCC-Professional Core courses	55	36.25
5	PEC-Professional Elective courses	12	07.50
6	OEC-Open Elective courses	15	09.37
7	PW, MP and IS-Project Work, Mini Project work and Internship	20	12.50
8	Mandatory Courses	Non-Credit	00.00
	Total	**160**	**100.00**
*Minor variations are allowed as per the need of respective discipline			

24RNBE 3.5. Scheme of Teaching and Evaluation

1) The Scheme of Teaching and Evaluation shall be framed by distributing the total credits over eight semesters as follows (shown in Table 6):

Table 6: Semester-wise Allocation of Credits				
	Semester	**Credits**	**Total Credits**	
I year	1	20	40	• Lecture(L): One hour/week: 1 credit
	2	20		• Tutorial(T): Two hours/week: 1 credit
II year	3	20	40	• Practical/Lab/Drawing (P): Two hours/week:1 credit
	4	20		
III year	5	22	40	• Project, Mini-project, Internship, Seminar: Credits as recommended by Academic Council
	6	18		
IV year	7	24	40	
	8	16		

2) **Course Load:** Every student to register for a set of courses in each Semester, with the total number of credits being limited by considering the permissible weekly contact hours (typically: 25 hours/week). For this, an average course load of 20 credits/semester (typically 7 courses) generally acceptable; to also include 2 or 3 hours of non-credit mandatory courses in some semesters.

3) **Teaching-Learning Process:** The theory courses shall be designed to have the syllabus spanning over one semester depending on the credits allocated for them. That is, Four-credit theory courses shall be designed for 50-60 hours of Teaching-Learning process. Three-credit theory courses shall be designed for 40-45 hours of Teaching-Learning process. Two-credit theory courses shall be designed for 25-30 hours of Teaching-Learning process. One-credit theory courses shall be designed for 15 hours of Teaching-Learning process.

4) The Scheme of Teaching and Evaluation provides the list of courses offered in a semester; their types, course credits in L-T-P format and the contact hours. As per this, Detailed syllabus content, Hour distribution, Text and Reference books, Assessment and Evaluation procedure shall also be provided for all the semesters by the concerned department's Board of Studies. A course may include online references and virtual labs, approved by the Academic Council.

5) The composition of courses in the curriculum may be only a theory, a theory with practical or only a practical. These carry separate course codes and each are considered as separate 'head of passing'.

6) The syllabus formulated shall be well structured and enable CBCS implementation, provide MEME options and incorporate Outcome Based Education (OBE) framework.

7) The Institution shall provide necessary class rooms, lab equipment, internet and computing facilities to meet the standards as specified by the University and Concerned Statutory bodies, resulting in proper teaching-learning environment for the students.

24RNBE 3.6. Course Registration

1) It is mandatory for every student to register for the semester to attend various courses/earn credits, using the prescribed Course Registration Form (CRF), till he/she completes the programme. The registration is normally done on the last two working days of each semester upon completion of the SEE. In all circumstances, registration shall be completed on or before the prescribed last date for registration announced in the Academic Calendar. The registration of courses in each semester in the Institution's portal (webpage) is mandatory.

2) **Student mentoring:** On joining the college, a group of students are assigned a Mentor from the concerned department offering the programme. Students are advised to consult the Mentor on any matter relating to their academic performance and the courses they may register in various semesters. Mentor guides the students to complete their courses of study for the required degree in a smooth and satisfactory manner.

3) **Minimum number of registrations for offering a course:** There is no restriction on minimum registrations in a professional core course. However, the number of students registered for any professional elective course /open elective course/ ability enhancement course (from 3rd semester onwards) offered by the departments shall not be less than 10. If it happens so, the concerned department must seek permission from the Academic Council of the Institution to offer the course.

24RNBE 3.6.1. Course Registration Procedure

The procedure involves the following steps:

1) A student shall register for required courses each semester with prior permission from the mentor.

2) The student can register for courses he intends to take during a given semester on the basis of his plan for each programme as given in the Scheme of Teaching and Evaluation and as per the advice of the Mentor.

3) The students shall decide on the courses to be registered during the ensuing semester immediately after their SEE examinations.

4) The mentor is expected to discuss with the student his academic performance during the previous semesters and then decide the number and nature of the courses for which the student can register during the semester within the framework of the Regulations.

5) The mentor may advise the student to drop one or more courses/activities based on his/her academic performance. The mentor may even advise a reduced load over several semesters for students with poor performance at the end of the first semester/year.

6) Every student is permitted to register for the courses to an extent subjected to the conditions under clause 24RNBE 3.6.2.

7) Students are not permitted to re-register for a course, which they have already passed.

8) The student shall fill up the Course Registration Form (CRF), stating the courses that they propose to complete during the ensuing semester as per the prescribed curriculum.

9) Students must take the print of the completed CRF, take signature of the mentor and submit to the concerned Head of the department within the date notified by the Institution.

10) Students having outstanding dues to the Institution, or hostel, may not be permitted to register.

11) The registration is deemed to be complete only on the approval of concerned Head of the department.

12) Without registration, any academic activity (course/seminar etc.) undergone by student will not be counted towards the requirements of the degree.

13) A student shall exercise the option in respect of a higher semester Professional elective course/Open elective course/Ability Enhancement course and register for the same at the end of the previous semester. However, the student may be permitted to opt for a change of Elective course/s within 15 days from the date of commencement of the semester as per the academic calendar of the Institution.

24RNBE 3.6.2. Permitted Maximum Credits for Registration

The student shall be permitted to register in a semester for that number of courses with total credits not exceeding 28. These 28 credits, include Minor/Honours degree courses, the courses of the regular semester and backlog courses. The registration of these additional credits also includes the courses with a shortage of attendance and the courses with unfulfilled CIE requirements. A student shall pay the prescribed registration fees as notified by the Institution from time to time.

24RNBE 3.6.3. Late Registration

Registration beyond the last date may be permitted only in special cases till the date specified in the Academic Calendar, on payment of a late registration fee.

24RNBE 3.6.4. Registration for Non-Credit Mandatory Courses

1) Formal registration for these courses shall also be done along with other course, at the beginning of the semesters.

2) Non-credit requirements are assessed as Pass (PP)/Not Pass (NP) subject to the fulfillment of the minimum requirements of the specified activities and a minimum of 85% attendance. The award of degree is subject to successful completion of these requirements.

3) Supposedly NP grade is awarded, the student has to re-register for the course when offered next in the subsequent semesters and pass within two years. The grades shall be submitted to the Controller of Examinations through Head of the Department before the commencement of the SEE.

24RNBE 3.6.5. Course substitution

A student obtaining 'F' grade four times in a course, other than the Professional core courses, is permitted to choose an equivalent course for substitution on approval from Head of the Department and Principal. The student shall re-register for the new course and complete the course requirements subjected to the conditions of clause 24RNBE 5.2. A student shall not be permitted to avail this option beyond a maximum of two courses during the programme.

24RNBE 3.7. Attendance Requirement

1) Every prescribed course shall be considered as a unit for the calculation of attendance. The students are required to attend all the lectures, tutorials, practical and other prescribed curricular and co-curricular activities, and earn full attendance. However, a student shall obtain a minimum attendance of 85% in each of the courses registered. If the attendance is below 85%, the shortage up to a maximum of 10% of the attendance may be condoned by the Principal on the specific recommendations of the concerned Head of the department. This provision shall be utilized based on medical grounds, participation in NSS/NCC/Red Cross/National level Republic day and Independence Day Parade / Participation in University /State /National /International level sports and cultural activities seminars, workshops, paper presentation etc., of significant value, supported by valid documents. The Course Instructor may recommend for condoning the shortage of attendance and submit the application with documents through the concerned Head of the department along with his/her recommendation to the office of the Principal before the last day of the semester.

2) The basis for the calculation of attendance shall be the period prescribed by the Institution by its academic calendar of events and as notified by the Controller of Examinations.

3) In case of late admissions, approved by competent authority (KEA/DTE/VTU), for admission to 1st semester and 3rd semester (lateral

entry scheme), the attendance shall be reckoned from the date of admission to the programme.

4) The concerned Head of the department shall notify every month, the list of candidates who are falling short of required attendance. The course Instructor/Mentor/Class Teacher shall inform the students as well as their parents/guardians about the attendance requirement and the attendance status every month. Students facing an attendance shortage shall be mentored to make up for the shortage.

5) A student who does not satisfy the attendance requirement in one or more courses (including bridge courses for lateral entry students, if any) shall not be permitted to appear for the Semester End Examinations of those courses. The grade card for such courses shall be marked as DX. The candidate shall repeat those courses whenever offered next. However, the student shall be allowed to appear for the SEE in other courses of the semester.

24RNBE 3.8. Supplementary/Fast-track Semester

1) The students who have satisfied CIE and Attendance requirements for a course and obtained F grade in SEE are permitted to appear for the same, directly in ensuing examination/s, as a backlog course. The students need not re-register for such course in the supplementary/fast-track semester. In case the student wishes to improve CIE, he/she has to re-register for supplementary/fast-track semester as and when offered next.

2) The student who obtains required attendance and CIE in supplementary semester, but obtains 'F' grade in SEE is permitted to appear for SEE subsequently as backlog course/s. The student need not repeat course for Attendance and CIE.

3) Any student not possessing satisfactory attendance and CIE score, is not permitted for SEE and shall be marked as 'DX' in the grade card against such course/s. In this case, the student has to re-register only for course/s marked as 'DX' in supplementary/subsequent semester whenever that course is offered next, and get the required attendance and CIE. Subsequently, the student becomes eligible for taking up SEE.

4) Courses with Transitional grades, namely, 'W', 'I' or 'X' are also eligible to register in supplementary semester (Refer 24RNBE6.2 for grades definition) in case if they wish to improve their score in CIE.

5) All courses may not be offered in the supplementary semester. It is the discretion of the college to offer the courses based on the availability of the resources. The Institution shall notify the time table for supplementary semester, well in advance.

6)   Supplementary semester is optional; it is for the student to make best use of the opportunity. Supplementary semester is a special semester and the student cannot demand the same as a matter of right.

7)   A student can register for a maximum of 16 credits in the supplementary semester.

8)   A student has to choose those courses which are offered by the Institution in a given supplementary semester.

9)   In the supplementary semester, each course shall be offered for required number of lectures/tutorial/laboratory hours as prescribed in the syllabus.

10)   A student will have the opportunity to register for supplementary semester which is offered after every academic year.

24RNBE 4.0. ASSESSMENT AND EVALUATION PROCEDURE

Formative, Summative and other Assessments shall be conducted as per the calendar of events in all the courses of the programme offered to the students, within the framework of Scheme of Teaching and Evaluation approved by Academic Council of the Institution.

24RNBE 4.1. Assessment and Evaluation Process

1)   CIE and SEE constitute the major evaluations prescribed for each course, with only those students maintaining a minimum standard in CIE are permitted to appear in the SEE of the course.

2)   In the case of IPCC, CIE marks shall be awarded separately for both theory and the laboratory. However, the laboratory may or may not have the SEE component in the evaluation.

3)   Laboratory courses are listed separately in the Scheme of Teaching and Evaluation. They are treated as separate "heads of passing" which are assessed and evaluated independently.

4)   CIE and SEE to carry 50% weightage each, to enable the course to be evaluated for a total of 100 marks, irrespective of its credits.

5)   The evaluation system of the programme is comprehensive and continuous during the entire period of the Semester by the faculty who is teaching the course. For a course, the evaluation and grading will be on the following parameters (shown in Table 7).

6)   The details regarding assessment and evaluation for specific courses can be found in Annexure-IV of this document.

Table 7: Maximum Marks allocation for various Assessment Components [CIE : SEE Weightage=50:50]		
A	Internal Assessment Tests (IAT)	30 Marks
B	Continuous and Comprehensive Evaluation (CCE)	20 Marks
	Total CIE (A + B)	50 Marks
C	Semester End Examination (SEE)	50 Marks
	Total Marks: CIE + SEE (A + B + C)	100 Marks

24RNBE 4.2. Continuous Internal Evaluation (CIE)

1) For theory course, with L-T-P distribution of L-0-0, the CIE will carry a maximum of 50 % weightage of the total marks of a course. Before the start of the Academic session of each semester, a faculty may choose for his course Internal Assessment Test (A) and a minimum of two of the following assessment methods (B) with suitable weightage for each.

    (i) Assignments (Individual or Group)

    (ii) Seminars

    (iii) Oral/Online Quizzes

    (iv) Group Discussions

    (v) Case studies

    (vi) Practical orientation on Design Thinking, Creativity and Innovation

    (vii) Participatory and Industry-Integrated Learning

    (viii) Practical activities/Problem solving exercises

    (ix) Class presentations

    (x) Analysis of Industry/Technical/Business Reports

    (xi) Reports on Guest Lectures/Webinars/ Industrial visits

    (xii) Industrial/Social/Rural Projects

    (xiii) Participation in Seminars/Academic Events/Symposia, etc.

    (xiv) Any other academic activity

2) The faculty will submit the 'CCE Assessment Plan' to the HOD and notify the same along with course syllabus before the start of semester. The total marks of the above two assessment components shall be scaled down to a maximum of 20 marks.

3) To assess the students in a course under IAT component, three tests shall be conducted in a semester. Each test shall be conducted for 50 marks. The average marks of all the tests is scaled to a maximum of 30 marks, which is then referred to as IAT marks.

4) The CIE marks awarded to students at different stages during the course shall be displayed on the notice board of the concerned Department to enable the students to identify any discrepancies.

5) The student shall obtain a minimum of 40% of IAT (A) and a minimum of 40% of CCE (B) leading to a minimum of 40% of the allotted CIE marks of the respective course (i.e., A + B) to be eligible to appear for the SEE in that course.

6) In the case of IPCC, with L-T-P distribution of L-0-P, the student shall obtain a minimum of 40% of allotted marks in CIE of the laboratory to be eligible to appear for SEE in that course. This is in addition to the requirement specified under (5) above for the theory part of the course. The CIE marks obtained by a student in the laboratory, if it is equal to or greater than 40% shall be retained until he/she passes the SEE. Otherwise, he/she shall re-register for the course when offered next.

7) If a student is unable to secure a minimum of 40% in allotted CIE marks in any course, he/she shall not be eligible to take up SEE/ viva-voce examination in that particular course. It shall be the responsibility of HOD to scrutinize the list of candidates and permit only the eligible students to take up SEE/ viva-voce examination. In the event of an ineligible student inadvertently being allowed to appear for the theory/ practical/ viva-voce examination, the result of the concerned student shall be withdrawn forthwith by the office of the Controller of Examinations (COE).

8) The list of such students, who have not secured the minimum marks in CIE, shall be sent to the office of the Controller of Examinations, along with the submission of CIE marks of the successful students.

9) After the submission of CIE marks to the Office of the Controller of Examinations, any changes in the marks requested by the HOD shall be considered, only after due approval of the Principal through COE office.

10) The students not obtaining 40% marks in CIE shall re-register for the course during subsequent semester whenever it is offered.

24RNBE 4.3. Semester End Examination (SEE)

1) Only those students who satisfy the attendance requirement as per 24RNBE3.7 and CIE requirement as per 24RNBE4.2 shall be eligible to appear for SEE of that course.

2) SEE shall be conducted for a maximum of 100 marks, and shall be proportionally scaled down to a maximum of 50 marks, which will be later added with CIE marks to determine total marks in that course (Refer Table 7). The total marks secured in the course will lead to the award of letter grade in that course (Refer Table 8).

3) The SEE for all the courses offered during the semester shall be conducted at the end of each semester except when there are no students taking examinations for any course as per the Scheme of Teaching and Evaluation.

4) Students having no backlog courses may not have more than one examination scheduled on the same day. However, students having backlog course may face a situation where they may have;
   a) Two examinations scheduled at the same time of the day.
   b) To take two examinations on the same day, one during morning session and the other in the afternoon session.
   c) Examinations on consecutive days.

   The students shall be prepared to appear for the examinations specified above under (b) and (c) cases. However, the Institution shall take utmost care to avoid scheduling as specified in (a), as far as possible. But in view of time constraint to complete the examinations and announce results on time, if it becomes unavoidable, the students shall choose to appear for the examination as per the advice of their mentor. As changing the examination date is not an option, the examination time table shall not be modified/altered/adjusted in any of the above three cases.

5) A student securing an 'F' grade in a course, shall reappear for that course during the subsequent SEE. The CIE marks awarded to the student at the first attempt in the concerned course shall be carried forward. Revised CIE marks in the case of re-registration are considered only for courses where grade DX was awarded.

6) For a pass ('P') grade in a course, sum total of CIE and SEE marks must be 40% of the maximum marks prescribed for a course as per the Scheme of Teaching and Evaluation.

7) The passing standards in CIE, SEE, all types of courses, and a semester in which grades are awarded shall be as per the clause 24RNBE6.3.

24RNBE 4.4. Makeup Examination

1) The Makeup Examination facility shall be available to the students who may have failed to attend the SEE of one or more Courses in a semester for valid reasons and given the **'I'** grade. Students having the **'X'** grade (Refer 24RNBE6.2) shall also be eligible to take advantage of this facility. The Makeup Examination shall be held immediately after announcement of SEE results.

2) All **'I'** and **'X'** Grade awarded to the students shall be converted by the Controller of Examination in concurrence with instructors concerned to appropriate letter grades (Refer Table 8) and communicated to the College

Authorities after the completion of the respective Makeup Examination. Any 'I' and 'X' grades still not converted within two days after the last scheduled Makeup Examination shall be automatically converted to **'F'** grade.

24RNBE 4.5. Maintenance of Examination Records

1) The candidate shall write test, assignments/unit-tests/written quizzes in Blue books, which shall be preserved in concerned department for at least 1 year after the announcement of Results, and shall be made available for verification as per the direction of Controller of Examinations.

2) Any corrections or overwriting of CIE marks on the blue book/drawing sheet/laboratory record etc., where CIE marks are awarded, shall bear the signature(s) of the concerned teacher(s), and the Head of the department.

3) CIE marks shall reach the COE's office before the commencement of the examinations as per the notification from the office of the COE.

24RNBE 4.6. Review Committee for CIE

1) There shall be review committee for Internal Assessments in every department, which shall be chaired by the Head of the department and two Senior Professors nominated by Dean/Principal. This committee shall be responsible for the entire process of Internal Assessment in the Department, including redressal of grievances, if any.

2) After each test, the Head of the department shall ensure that the evaluation is fair in each of the courses, scheme of valuation is uniformly followed and that the award of marks in the courses follow a normal distribution curve. If there are any lapses or the marks distribution is either right skewed or left skewed, corrective measures shall be taken, and the report to be submitted to Dean/ Principal.

3) Aspects which shall be noted during review are listed in the following:
   a) Split-up of marks used for each of the different types of assessment in the course.
   b) Mapping of questions to Course Outcomes.
   c) Ascertaining the complexity level of question paper.
   d) Assessment modes covering the entire syllabus or not.
   e) Manner of awarding the marks.
   f) Scheme of Evaluation.

24RNBE 4.7. Rejection of Result

1) A student is permitted to reject the total performance of a semester (including CIE marks) or reject only the result of his/her performance in SEE of a

semester. The rejection is permitted only once during the entire programme of study.

2) Students who desire to reject the SEE results of a semester shall reject the total performance (irrespective of the earned course grades) in all the courses of the semester either rejecting or retaining the CIE marks. However, rejection of the performance of the VIII semester project shall not be permitted.

3) Students who desire to reject the total SEE performance of an odd or even semester including CIE marks, have to repeat that odd or even semester of the prevailing scheme by taking readmission during the subsequent academic year/s, governed by clauses 24RNBE 5.2 and 24RNBE 5.3.

4) If the rejection of SEE results excluding CIE marks is of an odd semester, students shall be allowed to take admission to the immediate next even semester.

5) If the rejection of SEE results excluding CIE marks is of an even semester, then students shall be allowed to take admission to the next odd semester, governed by the clause 24RNBE 6.4.

6) Readmission to odd or even semesters shall not be considered as fresh admission, and therefore students shall continue to have the same University Seat Number (USN), which would have been allotted earlier.

7) The maximum duration of the programme shall be counted with reference to the USN.

8) Application for rejection of results excluding CIE and approval to reappear for SEE, shall be sent to COE's office through the HOD within 30 days from the date of announcement of the results, with prescribed fee as notified by COE's office from time to time. Late submission of applications shall not be accepted for any reason.

9) Application for rejection of results including CIE and approval for readmission, shall be sent to COE's office through the HOD within 30 days from the date of announcement of the results, with prescribed fee as notified by COE's office from time to time. Late submission of applications shall not be accepted for any reason.

10) Registration for SEE is compulsory if the students have satisfied the attendance and CIE requirements of odd/even semester. In case of students failing to register for SEE of the odd semester after satisfying the attendance and CIE requirements of the semester, they shall be permitted to move to even semester of the academic year. However, such students have to register for odd semester examinations conducted at the end of that academic year, and the registration shall be considered for the first attempt.

11) In case students fail to register for the odd semester SEE after successfully completing the even semester, they shall not be permitted to move to the higher odd semester of the subsequent academic year. Irrespective of a student appearing for SEE, he/she has to register for SEE for odd and even semesters before completing the academic year.

12) Students who opt for rejection of results of SEE, shall be eligible for the award of the degree and Minor degree, but not for the award of the ranks and Honours degree.

24RNBE 4.8. Academic Malpractice

Academic Malpractice shall be seriously viewed, and appropriate action shall be taken. In case of Malpractice during any of the Internal examinations, the course teacher or invigilator shall report to the HOD/Dean/Principal for penal action. If the HOD/Dean/Principal finds that the offence is serious enough or the candidate appeals in writing, then the matter shall be further referred to the Academic Malpractice Cases Consideration Committee (MPCCC) of the Institution. However, any malpractice in the SEE shall be directly reported to the MPCCC irrespective of the seriousness of the malpractice.

24RNBE 5.0. MAXIMUM DURATION FOR PROGRAMME COMPLETION

24RNBE 5.1. Multiple-Entry Multiple-Exit Options

While earning credits towards their B.E. degree, the students may judiciously use the options provided to them through CBCS and MEME clauses in the Regulations to obtain additional certificate and a B. Sc. Degree. However, they shall earn the required credits for the award of the degree within the maximum specified duration. The following distinctions are awarded under MEME options:

1) **Certificate in Respective programmes of Engineering:** A student who exits at the end of II year of the programme shall be awarded a certificate, if he/she successfully passes the registered courses and earns;
   (i) At least 50% of the credit requirements of B.E. programme (i.e., 80 credits). However, it is 25% for lateral admission candidates (i.e., 40 credits).
   (ii) At least 50% of the programme professional core courses (some specific courses may be specified, so the leaving student has decent skills), and,
   (iii) A minimum CGPA of 5.0.

2) **B.Sc. in respective programmes of Engineering:** A student who exits at the end of III year of the programme shall be awarded a B.Sc. degree, if he/she

successfully passes the registered courses and earns;

(i)   At least 75% of the credit requirements of B.E. programme (i.e., 120 credits), and completed at least 3 years (80 credits and 2 years respectively for lateral admission candidates) in the programme.

(ii)   100% of programme professional core courses.

(iii)   A minimum CGPA of 5.0.

With B.Sc., the student is eligible for entry into programmes which take B.Sc. as admission eligibility criteria.

3) **Re-entry to complete the programme:** A student exiting with a certificate or B.Sc. is entitled to re-enroll in the programme. All the credits will be transferred, if the student enrolls back within a limited period of 3 years of exiting. In case a student enrolls after that, then the transfer of credits should be examined by looking at the change in the curriculum from what the student did. Exits are permitted by the Institution within 15 days of the announcement of II year and III-year results, on written request for the award of certificate and B.Sc. degree by a student when he/she is eligible corresponding to these two exits, a maximum of two re-entries are permitted with the condition that he/she completes the programme within the maximum specified duration.

4)   **Programme Completion in another Institution:** The University permits a student to earn a certificate/B.Sc. in one Institution and complete the degree programme in another. This will enhance the value of certificate and the B.Sc. degree.

24RNBE 5.2. Maximum Duration for Programme Completion

The minimum duration of the programme is four academic years for regular students and three years for lateral entry students. Students admitted to first semester B.E., shall complete the programme within **eight academic years** from the year of the first admission, failing which they will not be eligible for the award of a degree. Students admitted to third semester B.E., under the lateral entry category shall complete the programme within **six academic years** from the year of first admission, failing which they will not be eligible for the award of the degree.

24RNBE 5.3. Readmission

1)   Students who are temporarily discontinuing the programme and getting readmitted to the eligible semester are permitted based on the clause 24RNBE5.2.

2)   The permission for readmission is only on request through the Principal to the University and is not treated as a matter of right. Such students shall not claim any benefits based on readmission.

3) Students who take readmission to any semester of the existing scheme from another scheme, as a repeater/fresher because of various reasons, shall attend and complete all the remaining semesters of the programme adhering to the regulations of the prevailing scheme and shall complete additional courses, if any, as per the decision of equivalence committee in concurrence with concerned Board of studies on establishing the equivalence between two schemes. Such a candidate shall not be eligible for the award of rank.

4) Readmission to odd/even semester shall not be considered as fresh admission and therefore students shall continue to have the same University Seat Number (USN), which was allotted at the time of his/her admission to the programme. The maximum duration of the programme shall be counted with reference to the USN allotted during his/her admission to the programme.

5) A student who has not obtained the eligibility for 3rd semester even after three academic years from the date of admission to 1st semester shall discontinue the programme or get readmitted to 1st semester of B.E., with a new USN but retaining the same year of admission.

6) The candidates who have temporarily discontinued the programme of study or changed the scheme of study from one to another because of various reasons or transferred with credits from the autonomous college of the University/affiliated college of the University/Constituent college of the University/Other University shall be eligible for the award of degree provided the total credits earned at that stage are equal to or greater than the credits prescribed under clause 24RNBE 3.3, and satisfy all other conditions of these Regulations.

7) In case, the forecasted or estimated credits are going to be less than those of the credits prescribed in these Regulations, on the completion of all the semesters of the programme under the prevailing Scheme, the candidate shall register for a course or courses not studied earlier and make up the credits which are equal to or greater than the prescribed credits. However, this is subject to condition that it is within the maximum duration of the programme.

8) In case of any discrepancy, the Principal/University shall decide on individual cases, which shall be final.

24RNBE 6.0. GRADING AND VERTICAL PROGRESSION

24RNBE 6.1. Award of Grades

1) The Institution adopts absolute grading system wherein the marks are converted to grades, and every semester result will be declared with Semester Grade Point Average (SGPA) on successful completion of that semester.

2) The total marks obtained by the student in CIE and SEE of a course is expressed as a percentage to compute the grade points and the letter grade is awarded as indicated in Table 8 below;

Table 8: Letter Grade and corresponding Grade points on a 10-point scale							
Letter Grade	O	A+	A	B+	B	C	P	F
	Outstanding	Excellent	Very Good	Good	Above Average	Average	Pass	Fail
Grade Point	10	9	8	7	6	5	4	0
% of Marks Scored	90-100	80-89	70-79	60-69	55-59	50-54	40-49	0-39

3) If there is no SEE for a course, then the CIE marks alone will be the basis for the determination of the letter grade.

24RNBE 6.2. Other Letter Grades

The letter grades specified in 24RNBE 6.1 are used as student performance measures in all kinds of assessments. However, the following letter grades are also awarded under the circumstances defined below.

1) **Transitional Grades:** The Transitional Grades such as such as, **'I', 'W'** and **'X'** shall be awarded to a student in the following cases. These grades need to be converted into one or the other of the letter grades (O - F) after the student completes his/her Course requirements, including the examinations.

   (i) **Grade 'I'**: Awarded to a student having satisfactory attendance at classes and meeting the passing standard at CIE in a Course, but remained absent from SEE for valid and convincing reasons acceptable to the College, like:

   • Illness or accident, which disabled him/her from attending SEE;

   • A calamity in the family at the time of SEE, which required the Student to be away from the College.

   • Any other verifiable exigency.

   (ii) **Grade 'W'**: Awarded to a student having satisfactory attendance at classes, but withdrawing from that Course before the prescribed date in a semester as per faculty advice.

   (iii) **Grade 'X':** Awarded to a student having CIE $\geq$ 90% in a Course, but SEE performance observed to be poor, which could result in an overall F Grade in the Course.

2) **Grade 'DX'**: Credits awarded will be 0. Credits are not included in CGPA.

This is for the case of attendance below 75% and/or for not securing minimum CIE marks. Hence the student shall repeat the course whenever offered next (In case of electives, course change is permitted).

3) **Grade AU**: No benefit of Credit. Indicative of satisfying the requirements of Audit course.

4) **Grade AB**: Absent for the SEE of a particular Course.

5) **Grade PP**: No benefit of credit. Indicative of passing a Non-credit Mandatory course.

6) **Grade NP**: No benefit of credit. Indicative of not passing a Non-credit Mandatory course.

7) **Grade IC**: No credit. Indicative of Incomplete. Basically, a place holder which gets converted to an appropriate grade after clearing SEE examination else converted to 'F'.

24RNBE 6.3. Passing Standards

1) **Maximum and Minimum CIE Marks:** The maximum weightage of CIE marks shall be 50. To appear for the SEE, the minimum CIE marks to be secured in each of the courses shall be 40% of the maximum marks of **CIE.**

2) **Maximum and Minimum SEE Marks:** The maximum weightage of SEE marks shall be 50 and marks to be secured for passing shall be 35% of the maximum marks of SEE.

3) **Eligibility for Passing a Course:** The overall passing marks shall be 40% of the maximum marks (the sum of CIE and SEE should be 40% of the maximum marks) of the course. That is, minimum passing grade (head of passing) shall be 'P'.

4) **A student who satisfies the conditions in (1), (2) and (3) above, and obtain any grade from 'O' to 'P' in a course shall be considered to have passed that course.**

5) A student shall be declared successful or 'passed' in any Non-credit course if he/she secures a 'Satisfactory Grade (PP)' for that Mandatory Course.

6) A student shall be awarded letter grade in a course as given below, if he/she has;

   a) Failed to satisfy the conditions under clause (4) above which leads to 'F' grade.

   b) Remained absent to SEE which leads to 'AB' grade.

   c) Attendance shortage in a course which leads to 'DX' grade.

   d) The course being incomplete for any reason which leads to 'IC' grade.

7) Students satisfying the attendance requirement but failing to secure the minimum percentage of CIE marks, in any course/s, shall not be eligible for

the SEE, conducted by the Institution and they shall be considered as failed in that course/those courses and marked as DX in the grade card against the course/s. However, they can appear for SEE conducted for other courses of the same semester and backlog course/s if any. The students are permitted to register afresh and appear for SEE after satisfying the CIE requirements in the same course/s when offered in the supplementary or in the main semester when offered next.

8) Each appearance to SEE or absence after completing CIE and attendance requirements to complete a course shall be treated as attempt.

9) A student shall be declared successful or 'passed' in the entire undergraduate programme, only when he/she secures a Grade point of '4' ('P' grade) or above in every registered course in each Semester during the entire programme.

24RNBE 6.4. Vertical Progression

A student progresses according to his/her performance and can register for the higher semester satisfying the conditions mentioned in clause 24RNBE 5.2.

1) **Students admitted to the first year:**
   a) Students having 'F' grade for the courses totaling to more than 16 credits in the 1st and 2nd semesters of the first year of the programme shall not be permitted to move to the 3rd semester (2nd year) of the programme. These courses include courses marked as DX.
   b) The students who fail to satisfy CIE and attendance requirement shall repeat the courses whenever it is offered next and become eligible for the 2nd year.

2) **Obtaining CIE:** From 3rd semester onwards the student who obtains the required attendance for the course, but not the required CIE marks is allowed to move forward to the next semester. However, the student shall mandatorily obtain the required CIE in the subsequent semester. Obtaining minimum CIE marks for the course is mandatory. It may also be noted that the student shall not be permitted to appear for SEE in such courses until he/she obtains the required CIE.

3) **Completion of backlog courses:** From 3rd Semester onwards,
   a) The student who obtains the required attendance for the course, CIE and appearing for SEE obtains 'F' grade shall be allowed to move forward to the next semester (odd/ even) irrespective of several 'F' grades, satisfying the clauses 24RNBE 3.3 and 24RNBE 5.2
   b) There shall be no restriction for promotion from an even to next odd semester (or odd to even semester) even if the student has not satisfied the attendance requirement in one or more courses (including bridge courses

for lateral entry student), but he/she shall not be eligible to appear for SEE in these courses. Such students shall repeat those courses whenever offered next.

4) A student shall be given admission to the 7th semester (IV year) provided he/she passes all courses of 1st and 2nd semesters,

5) Permitted Maximum credits for registration: The student shall be permitted to register for total courses as per the conditions mentioned in the clause 24RNBE 3.6.2.

6) Successive Failures and Alternate Course Selection:
   a) If a student not completing a course, other than the professional core course, even after four attempts, may drop that course and choose an alternate course having the same number of credits from the pool of courses suggested by the concerned Board of Studies.
   b) The course so selected should not have been studied by the student or to be studied in future at higher semesters. The faculty advisor shall guide the student in this regard.
   c) The Department shall make arrangements for the registration and conduction of CIE for the alternate course selected.
   d) This provision is given only for two courses (one at a time) during the entire maximum duration of the programme.
   e) This provision is optional; the student/s can continue registering for the same course without opting for a change.

24RNBE 6.5. Conditions for Re-registering for a Course:

1) Student who do not pass the course as per clause 24RNBE6.3(3) and awarded 'F' grade may re-register and improve their performance.

2) Such student, after passing the failed course in subsequent examination/s, will be awarded letter grade based on the marks he scores while passing in the subsequent examination/s.

24RNBE 6.6. Computation of SGPA and CGPA

1) Semester Grade Point Average (SGPA) will be awarded at the end of each Semester and Cumulative Grade Point Average (CGPA) will be awarded at the end of the program. However, CGPA is calculated at the end of each semester and reflected in the grade card for indicating the progress of the student.

2) Generally, each course in a program is associated with a number of credits (C). Based on the number of Credits for a course and obtained Grade Points (GP) for that course in a Semester, the GPA is calculated as given below:
   a) The SGPA is the ratio of sum of the products of number of credits and the corresponding grade points secured by a student in all the courses taken

by him/her to the sum of credits of all the course undergone by a student, i.e.,

$$SGPA = \frac{\sum(C_i \times G_i)}{\sum C_i}$$

Where C_i is the number of credits of the ith course and G_i is the grade points scored by the student in the ith course.

b) The CGPA is also calculated in the same manner considering all the courses undergone successfully by a student **over all the semesters** of the programme, i.e.,

$$CGPA = \frac{\sum(C_i \times G_i)}{\sum C_i}$$

Where C_i is the Course credits of the ith course and G_i is the grade points scored by the student in the i_{th} course. However, CGPA is also calculated at the end of every semester except the first semester considering credits and grade points of all courses until that semester, excluding those courses with F-grades.

Finally, the SGPA and CGPA shall be rounded off to 2 decimal points and reported in the grade cards. Details of calculation of SGPA and CGPA are available in Annexure-I.

24RNBE 6.7. Conversions of CGPA into Percentage of marks

The following formula for conversion of the CGPA on a 10-point scale into the percentage of marks (M) for employment, higher studies, etc., may be used;

Percentage of marks secured, M= CGPA x 10

Suppose, CGPA= 7.8, then Percentage of marks secured, M = 78%

24RNBE 6.8. Class Equivalence

Subsequent to the conversion of final CGPA, after successful completion of the Program, into the percentage of marks (M), a graduating student is reckoned to have passed in;

(i)   First Class with Distinction (FCD), if M ≥ 70%

(ii)   First Class (FC) if 60 % ≤ M < 70%

(iii)   Second Class (SC) if 50 % ≤ M < 60%

(iv)   Pass Class (P) if 40 % ≤ M < 50%

24RNBE 6.9. Grade cards, Certificates and Transcripts

1) **Grade Cards:** At the end of each semester, a Grade Card shall be issued to all the registered students of that semester, indicating the Course code, Title,

Number of credits, Letter grade awarded, and Credits earned, for all the courses as specified in the scheme of teaching and evaluation, along with total credits earned, SGPA and CGPA as applicable. This may have F grades and other temporary grades awarded to the student.

2) **Grade Certificate:** The Grade Certificate, having the same format of Grade Card but indicating the month and year of clearing a course, is issued to a student on demand only, on clearing all temporary grades specified in the grade card.

3) **Transcripts:** Transcript is the consolidated statement of the academic performance of a student for all the semesters since joining the programme and is generally issued on request to a student, after successful completion of the programme along with the degree certificate.

4) For those students who have taken multiple attempts to clear a course, the transcript given on successful completion of the programme will only contain earned pass grade ('O' to 'P', AU and PP); the courses cleared subsequently will however be shown in the respective semester with Month and Year in which the student has finally cleared the course. The transcript will show only the overall CGPA based on all the courses taken by the student. Credits earned beyond the requirement for the award of the degree shall be shown as additional courses separately, indicating the grade earned by the student. Additional copies of the transcript can be obtained if needed, on request submitted along with payment of applicable fee.

5) Students who have not yet completed the programme can obtain an interim Transcript at the end of any semester, if needed, on request and upon payment of applicable fee. The interim Transcript includes failed course, which have not been cleared at the time of issue.

24RNBE 6.10. Mandatory Earning of Activity Points

The Activity points earned shall be reflected on the student's eighth semester Grade card. Activity points (non-credit) have no effect on SGPA/CGPA. In case a student fails to earn the prescribed activity points before the commencement of 8th semester examinations, the Eighth semester Grade card shall be issued only after earning the required activity points. Students shall be admitted for the award of the degree only after the release of the Eighth semester Grade card. Table 9 below indicates the number of Activity points to be mandatorily earned by various categories of students.

Table 9: Mandatory Earning of Activity Points		
Sl.No.	**Student Category**	**Activity Points prescribed**
1	Regular Students admitted to the 4-year Degree Programme	100
2	Students entering 4-year Degree Programme through Lateral Entry	75
3	Students transferred from other Universities to the 5th semester	50

24RNBE 7.0. ELIGIBILITY FOR AWARD OF DEGREE AND RANKS

24RNBE 7.1. B.E. Degree

a) Students shall be declared to have completed the undergraduate programme of B.E. degree and shall be eligible for the award of degree provided they have undergone the stipulated course work of all the semesters under the Scheme of Teaching and Evaluation, and have earned the prescribed number of credits as per clause 24RNBE3.3 within the permitted maximum duration specified under clause 24RNBE5.2

b) For the award of degree, completion of bridge courses, if any, as applicable is compulsory.

24RNBE 7.2. B.E. with Honours Degree

Students shall be declared to have completed the undergraduate programme of B.E. degree with Honours, provided they have,

a) Been declared eligible for the award of the degree as per clause 24RNBE7.1,

b) Earned additional 18 or more credits through BOS approved Online Courses, and

c) Satisfied the conditions of "VTU (Award of Honours/Minor at B.E./B.Tech. Degree Programmes) Regulations, 2022".

24RNBE 7.3. B.E. with Minor Degree

Students shall be declared to have completed the undergraduate programme of B.E. with Minor degree, provided they have,

a) Been declared eligible for the award of the degree as per clause 24RNBE7.1,

b) Earned additional 18 or more credits through BOS approved Online Courses, and

c) Satisfied the conditions of "VTU (Award of Honours/Minor at B.E./B.Tech. Degree Programmes) Regulations, 2022".

24RNBE 7.4. Award of Degree for an Extraordinary Student

1) The Institution can offer a fast-track degree for an extra-ordinary student. The

same is done by offering courses of his/her choice to fulfill the requirement of the programme in three and a half years.

2) However, the degree shall be awarded on completion of 4 years.

3) The course completion letter shall be issued by the Institution immediately after the completion of the programme, without considering the minimum duration.

4) The extra-ordinary student is one with CGPA $\geq$ 9.0 in 2nd and 3rd semesters and continue to maintain the same in all the semesters. Otherwise his/her registration for fast-track degree shall get cancelled automatically.

5) Aspirant students shall register in the Institution's portal at the 4th semester level, with the prescribed registration fee as fixed by the Institution from time to time. Such students shall register for more credits, other than the regular semester credits, along with the 5th semester registration.

24RNBE 7.5. Non-compliance Cases

1) **Non-compliance of Mini-project:** The mini-project shall be considered as a head of passing and shall be considered for the award of the degree. Those, who do not take up/complete the mini-project shall be declared fail in that course and shall have to complete the same during subsequent SEE, after satisfying the Mini- project requirements.

2) **Non-compliance of Major-project:** The Major-project or project work shall be considered as a head of passing and shall be considered for the award of the degree. Those, who do not take up/complete the project work shall be declared fail in that course and shall have to complete the same during subsequent SEE, after satisfying the Major-project requirements.

3) **Non-compliance of Internship:** All the students of B.E. shall have to undergo mandatory internship. The internship shall be considered as a head of passing and shall be considered for the award of the degree. Those who do not take up/ complete the internship shall be declared fail in that course and shall have to complete the same during subsequent SEE after satisfying the internship requirements.

4) **Non-compliance to earn credits in Honours and Minors:** When a student registering for honours or minors degree is unable to complete all the required courses or earn the required credits within the programme duration or at the time of becoming eligible for the award of the Degree, may withdraw from these additional degree programmes and request for the award of a certificate. The Institution shall consider those additional courses passed as Value Added Courses and issue a certificate to that effect.

24RNBE 7.6. Award of Ranks

For the award of Ranks and Medals, the conditions stipulated by the Donor shall be considered subject to the provisions of the statutes framed by the Institution for such awards.

1) For the award of rank in a specialization of Bachelor of Engineering the highest CGPA secured by the students at the end of Eight Semesters shall be considered after having completed the required credits.

2) The additional credits earned for the award of Honours/Minors degree shall not have any bearing for the Rank declaration.

3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering provided that the student,
   a) i) Has passed all the courses of I to VIII semester in the first attempt only, in the case of candidates admitted to I year.
      ii) Has passed all the courses (including bridge courses) of III to VIII semester in the first attempt only, in the case of candidates admitted under lateral entry scheme.
   b) Is not a repeater in any semester because of rejection of result of a semester/shortage of attendance/ temporarily discontinued and rejoined/readmitted, etc.
   c) Has completed all the semesters (I to VIII or III to VIII for lateral entry students) in the Institution.

4) The total number of ranks awarded shall be 10% of total number of students who appeared in the VIII semester subject to a maximum of 10 ranks in specialization.

5) For award of ranks in a UG programme, a minimum of 10 students should have appeared in the VIII semester examination.

Illustration:
   a) If 205 students appeared for the Eighth semester in Electronics and Communication Engineering programme, the number of ranks to be awarded for Electronics and Communication shall be 10.
   b) If 70 students appeared for the Eighth semester in Computer Science and Engineering- Data Science programme, the number of ranks to be award for Computer Science and Engineering- Data Science shall be 7.
   c) In case of a fractional number of ranks, it is rounded to a higher integer only when the first digit after the decimal point is ≥ 5.

6) Ranks shall be awarded based on the merit of the students as determined by CGPA. If two or more students get the same CGPA, the tie shall be resolved by considering the number of times a student has obtained a higher SGPA. If it is not resolved even at this stage, the number of times a student has obtained

higher grades like O, A+, A, B+, etc., shall be considered to decide the order of the rank.

24RNBE 8.0. CHANGE OF COLLEGE-TRANSFER OF STUDENTS

The VTU regulations governing the change of college shall be followed (Refer Annexure II for the web link)

24RNBE 9.0. CHANGE OF BRANCH

The VTU regulations governing the change of Branch shall be followed (Refer Annexure III for the web link)

24RNBE 10.0. MISCELLANEOUS

1) The use of Online content in courses offered at the Institution shall be based on the VTU guidelines issued from time to time.
2) The VTU regulations governing the Academic Bank of Credits shall be followed (Refer Annexure V).

24RNBE 11.0. APPLICABILITY AND POWER TO MODIFY

1) The regulations governing the degree of Bachelor of Engineering offered by RNS Institute of Technology under Visvesvaraya Technological University shall be binding on all concerned.
2) Notwithstanding anything contained in the foregoing, the Institution (with approval from the University) / the University shall have the power to issue directions / orders to address and removal of any discrepancy.
3) Nothing in the foregoing may be construed as limiting the power of the Institution (with approval from University)/ University to amend, modify or repeal any or all of the above.

Annexure-I

An illustrative example to calculate SGPA and CGPA for one Academic year is shown in Table I:

Table I: An illustrative example of SGPA and CGPA calculations for one Academic year							
Odd Sem							
Semester (Odd:I, Even:II)	Course Code	Credits	Grade	Earned Credits	Grade Points (GP)	Credit Points (CP)	SGPA, CGPA
I	XX11	3	B	3	6	3x6=18	
I	XX12	3	AB (F)	0	0	3x0=00	
I	XX13	3	A+	3	9	3x9=27	
I	XX14	3	F	0	0	3x0=00	
I	XX15	3	B	3	6	3x6=18	SGPA=95/20 = 4.75
I	XX16	1	C	1	5	1x5=05	
I	XX17	1	A+	1	9	1x9=09	
I	XX18	2	B	2	6	2x6=12	
I	XX19	1	B	1	6	1x6=06	
Total		**20**		**14**		**95**	
Even Sem							
II	XX21	3	B+	3	7	3x7=21	
II	XX22	3	A	3	8	3x8=24	
II	XX23	3	B	3	6	3x6=18	SGPA=178/26 = 6.85
II	XX24	3	C	3	5	3x6=15	
II	XX25	3	A+	3	9	3x6=27	
II	XX26	1	F	0	0	1x0=00	
II	XX27	1	A	1	8	1x8=08	
II	XX28	2	A+	2	9	2x9=18	CGPA = (95+178) / (14+25) =7.00
II	XX29	1	A	1	8	1x8=08	
1st Sem							
I	XX12	3	B	3	6	3x6=18	
I	XX14	3	B+	3	7	3x7=21	
Total		**26**		**25**		**178**	

An illustrative example to calculate CGPA of the program is shown in Table II.

Table II: Illustration of Calculation of CGPA of the program								
Semester	I	II	III	IV	V	VI	VII	VIII
Credits of the Semester (C_{T_i})	20	20	20	20	20	20	24	16
SGPA (S_i)	5.0	6.73	9.20	6.86	8.18	7.73	9.18	9.40
$\sum C_{T_i} S_i$	100.00	134.60	184.00	137.20	163.60	154.60	220.32	150.40

$$\text{CGPA} = \frac{(100.00 + 134.60 + 184.00 + 137.20 + 163.60 + 154.60 + 220.32 + 150.40)}{160} = 7.78$$

For lateral entry students:

$$\text{CGPA} = \frac{(184.00 + 137.20 + 163.60 + 154.60 + 220.32 + 150.40)}{120} = 8.42$$

Annexure-II

Regulations Governing the Change of College

Please look into;

https://vtu.ac.in/wp-content/uploads/2020/07/1305-1.pdf

https://vtu.ac.in/wp-content/uploads/2021/01/Notified-COC-Regulations.pdf

Annexure-III

Regulations Governing the Change of Branch

Please look into;

https://vtu.ac.in/wp-content/uploads/2023/11/4288-Notification.pdf

https://vtu.ac.in/wp-content/uploads/2020/07/1306-3.pdf

https://vtu.ac.in/wp-content/uploads/2021/01/Notified-COB-Regulations.pdf

Annexure-IV

24RNBE A4.0. ASSESSMENT AND EVALUATION IN SPECIFIC COURSES

24RNBE A4.1. CIE and SEE Assessment in Specific Courses

Examination and Evaluation for all the courses shall be done as specified under Regulation clauses of 24RNBE4.1, 24RNBE4.2 and 24RNBE4.3 for SEE and CIE. However, for some specific courses, the procedure is made clear in the following clauses.

24RNBE A4.1.1. Practical Courses

CIE for Practical work courses

1) CIE marks for a practical course shall be 50 marks. The split-up of CIE marks for record/journal and test to be split in the ratio 60:40.

   (i) Each experiment shall be evaluated for conduction with observation sheet and record write-up. Split-up of marks for the evaluation of record shall be made known to students at the beginning of the semester.

   (ii) Record shall contain all the specified experiments in the syllabus and each experiment write-up be evaluated for 10 marks.

   (iii) Total marks scored shall be scaled down to 30 marks (60% of maximum marks)

   (iv) Weightage to be given for neatness and submission of record/write-up on time.

   (v) Two class tests; one in the mid of the semester, and another at the end of the semester will be conducted for 100 marks each and scaled down to 20 marks (40% of maximum marks).

   (vi) In test write-up, conduction of experiment, acceptable result, and procedural knowledge shall carry a weightage of 60% and rest 40% for viva-voce.

   (vii) The suitable split-up of marks can be designed to evaluate each student's performance and learning ability.

   The sum of scaled-down marks scored in the report write-up/journal and marks of the test shall be the total CIE marks scored by the student.

2) In the case of Practical courses wherein record write-up is not mandatory, two Internal tests for laboratory courses with software experiments shall be conducted for a total of 100 marks, jointly by the concerned teacher and a senior faculty nominated by the Principal/COE/HOD. In this evaluation, observation, write-up of procedure/algorithm/program, and execution of

experiment shall be assessed for 80 marks and the viva-voce for 20 marks. Marks scored out of 100 shall be scaled down to 50 marks.

SEE for Practical work Courses

1) The SEE marks for the practical courses shall be 50 marks.

2) SEE shall be conducted jointly by the two examiners, one internal and the other external, appointed by COE/Principal.

3) In case the external examiner expresses his/her inability to conduct the examination at the last moment, the Principal/COE shall appoint a senior faculty member of the department to conduct the examination along with the already appointed internal examiner.

4) All laboratory experiments are to be included for practical examination.

5) Breakup of marks and the instructions printed on the cover page of the answer script are to be strictly adhered to by the examiners, OR, based on the course requirement, a split-up of marks for evaluation shall be decided jointly by the examiners.

6) Students shall pick one question (experiment) from the questions pool prepared by the examiners jointly.

7) Evaluation of write-up / conduction procedure and result / viva will be conducted jointly by the examiners.

8) The split-up of maximum allocated marks for SEE are:
   a) Procedure/write-up (20 % of maximum marks)
   b) Conduction and result (60% of maximum marks)
   c) Viva-voce (20% of maximum marks)

9) SEE for the practical course shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks.

10) Change of experiment is allowed only once and 20% marks allotted to the procedure/write-up part to be made zero (Evaluation is to be carried out for 80% of total maximum marks).

11) The duration of SEE shall be two or three hours.

SEE for Practical-oriented Ability Enhancement Courses

1) The SEE marks for the practical courses shall be for 50 marks.

2) SEE shall be conducted jointly by the two examiners of the Institution appointed by COE/Principal.

3) All laboratory experiments are to be included for practical examination.

4) Breakup of marks and the instructions printed on the cover page of the answer script are to be strictly adhered to by the examiners, OR, based on the course requirement, a split-up of marks for evaluation shall be decided jointly by the examiners.

5) Students shall pick one question (experiment) from the questions pool prepared by the examiners jointly.

6) Evaluation of write-up/conduction procedure and result/viva will be conducted jointly by the examiners.

7) The split-up of maximum allocated marks for SEE are:
   (i) Procedure/write-up: 20%
   (ii) Conduction and result: 60%
   (iii) Viva-voce: 20%

8) SEE for the practical course shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks.

9) Change of experiment is allowed only once and 20% Marks allotted to the procedure/write-up part to be made zero (Evaluation is to be carried out for 80% of total maximum marks).

10) The duration of SEE shall be three hours.

24RNBE A4.1.2. Computer Aided Engineering Drawing (CAED)

1) The CIE marks for CAED course offered in the 1st year shall be assessed as follows:
   (i) The CIE awarded in the case of drawing shall be based on the weekly evaluation of the classwork (sketching and computer-aided drawing) with each drawing evaluated as mentioned module-wise in the syllabus. The marks for all the drawing sheets are added and scaled down to 30 marks.
   (ii) Two class tests; one in the mid of the semester, and another at the end of the semester will be conducted for 50 marks each and scaled down to 20 marks.
   (iii) CIE marks (out of 50) scored by the student is the sum of classwork evaluation and test marks.

2) The SEE shall be conducted and evaluated for a maximum of 100 marks. Marks obtained shall be scaled down to 50 marks.
   (i) SEE will be conducted by the two examiners of the Institution appointed by COE approved by Principal.
   (ii) The question papers shall be set in advance by the concerned department/BOE and to be submitted to COE office.
   (iii) The question papers will be issued from COE office to the concerned examiners on the day of examination.
   (iv) Evaluation shall be carried out jointly by both the examiners as per the scheme of Teaching and Evaluation.

24RNBE A4.1.3. Engineering Graphics/Drawing/Field works

A. Engineering Graphics and Drawing (Laboratory Course)

1) The CIE marks awarded for higher semester Engineering Graphics/Drawings/Design Drawings offered by various branches shall be based on the evaluation of the sheets and one test in the ratio 60:40. Method of assessing the CIE for such courses shall be as per the scheme of Teaching and Evaluation of the course.

2) The SEE shall be conducted and evaluated for a maximum of 100 marks. Marks obtained shall be scaled down to 50 marks.

   (i) SEE will be conducted by the two examiners of the Institution appointed by COE approved by Principal.

   (ii) The question papers shall be set in advance by the concerned department/BOE and to be submitted to COE office.

   (iii) The question papers will be issued from COE office to the concerned examiners on the day of examination.

   (iv) Evaluation shall be carried out jointly by both the examiners as per the scheme of Teaching and Evaluation.

B. Field works

1) Field works include Surveying practice/ Socio-Economic survey/Marketing survey/traffic survey/environmental survey. The CIE marks shall be split into two components with 60% of maximum marks (30 marks) are considered for fieldwork report evaluation and 40% of maximum marks (20 marks) for internal assessment test evaluation. Field work evaluation includes attendance, data collection through survey, use of data for design drawing, and report. The split-up of marks for the report shall be decided by the faculty member who is guiding them for the design drawing and report. The criteria for split-up of marks shall be done to achieve the course outcomes. The report evaluation shall be carried out for 100 marks and scored marks shall be scaled down to 30 marks. The assessment shall be through a presentation of the report followed by the viva-voce. This test shall be conducted by the fieldwork project guide and fieldwork coordinator. If the fieldwork coordinator happens to be the same faculty, then, HOD or senior faculty member will conduct the test with guide. A test similar to SEE shall be conducted for 100 marks and marks scored shall be scaled down to 20 marks. The sum of the report and test marks shall be the total CIE marks for field work.

2) SEE for field work conducted by the two examiners of the Institution appointed by the COE/Principal. Report and design drawing evaluation

and viva-voce are in the ratio of 60:40. Field work will be jointly evaluated by the examiners and the duration of SEE shall be three hours.

24RNBE A4.1.4. Internship

CIE (maximum 100 marks)

1) The internship shall be taken up during the period specified in the Scheme of Teaching and Evaluation. The department shall nominate faculty member/s to facilitate, guide and supervise students under an internship. The student shall report the progress of the internship to the Guide in regular intervals and seek his/her advice. The Guide shall maintain the progress record of the candidates undergoing internship. Duration of the internship shall be as mentioned in the scheme of Teaching and Evaluation. The internship examination shall be conducted at the end of the internship period.

2) Report evaluation: Internship Report shall be evaluated for a maximum of 60 marks. The split-up of marks suggested for report evaluation shall be based on,

   a) Internship Report submission (10 marks).
   b) Presentation of the outcomes in the report (25 marks) and
   c) Technical content of the report (25 marks). Weightage shall be given for paper publication in reputed journals/refereed journals/ Conferences / Product developed / Patent filed - only for Industry /Research Internship.

3) Viva-voce shall be conducted for a maximum of 40 marks. The split-up of marks suggested are;

   a) For demonstration of (soft) skills / Engineering knowledge gained (15 marks).
   b) The question-answer session will check for the understanding of the fundamentals and concepts (15 marks).
   c) Clarity in answering the questions (10 marks).
   d) Viva-voce shall be conducted by the mentor/guide and Head of the department / one of the senior faculty members assigned by the HOD.

4) Those who do not complete the internship shall be declared fail and shall complete it during subsequent SEE after satisfying the internship requirements during subsequent semester.

SEE (maximum 100 marks)

1) SEE shall be conducted by both the Internal examiners approved by COE/Principal. The internal examiner shall be the guide for SEE. The external guide for the internship shall be the external examiner for SEE.

2) Examination for internship shall be conducted at the college and the date shall be fixed in consultation with the external guide. The examiners shall jointly award the SEE marks.

3) In case the external guide expresses his/her inability to conduct the examination at the last moment, the Principal/COE shall appoint a senior faculty member of the department to conduct the examination along with the internal guide.

4) Split-up of marks for evaluation may be the same as suggested for CIE.

24RNBE A4.1.5. Seminar

1) The maximum marks prescribed for the seminar and the evaluation process shall be notified by the Institution before offering the course.

2) The seminar performance evaluation shall be a part of CIE only in a course where required.

3) The seminar shall be assessed as indicated below:

   a) The Head of the department shall make arrangements for the conduction of seminars through a committee of faculty members of the department. The committee, constituted for the purpose by the head of the department, shall award the CIE marks for the seminar. The committee shall consist of three senior faculty members of the department and the most senior among them shall be the chairperson.

   b) The marks awarded for seminar shall be based on the evaluation of the seminar report, presentation skill and viva-voce (question-answers), in the ratio of 60:20:20.

   c) Split-up of assessment marks are as follows;

   (i) Report marks to be allotted by the seminar guide/s (60 marks)
       A) Submission of the report (10 marks)
       B) Literature survey (20 marks) and,
       C) Technical content of the report (30 marks)
   (ii) Seminar presentation (20 marks).
   (iii) Viva-voce (20 marks).

24RNBE A4.1.6. Mini-Project (maximum 100 marks)

1) The mini-project performance of a student shall be evaluated under CIE only. The maximum marks prescribed for CIE shall be as mentioned in the Scheme of Teaching and Evaluation (100 marks).

2) The Head of the department shall make arrangements for the conduction of viva-voce evaluation of the mini-project. The committee shall consist of a

faculty guide / mentor and two senior faculty members of the department and the most senior among them shall be the chairperson.

3) The CIE marks awarded for the mini-project shall be based on the evaluation of mini-project report, project presentation skill, and viva-voce in the ratio of 60:20:20.

4) The marks awarded for the mini-project report shall be the same for all the students of the batch. The faculty guide / mentor guiding the mini-project shall evaluate the performance for 60 marks.

5) The committee shall evaluate mini-project work for the rest of 40 marks considering performance in project presentation and viva-voce.
   a) Project presentation (20 marks)
   b) Viva-voce (20 marks)

24RNBE A4.1.7. Project Work

The project work shall be evaluated considering both CIE and SEE. The CIE and SEE marks shall be as mentioned in the scheme of Teaching and Evaluation (maximum 100 marks allotted to both CIE and SEE).

CIE

1) The Head of the department shall make arrangements for the conduction of viva-voce evaluation of the project work. The committee shall consist of a faculty guide / mentor and two senior faculty members of the department and the most senior among them shall be the chairperson.

2) The CIE marks awarded for the project work shall be based on the evaluation of project report, project presentation skill, and viva-voce in the ratio of 60:20:20.

3) The marks awarded for the project report shall be the same for all the students of the batch. The faculty guide / mentor guiding the mini-project shall evaluate the performance for 60 marks.

4) The committee shall evaluate project work for the rest of 40 marks considering performance in project presentation and viva-voce.

   a) Project presentation (20 marks)
   b) Viva-voce (20 marks)

SEE

1) The project work shall be evaluated for a maximum of 100 marks in SEE.

2) The project work will be conducted by the two examiners, one internal and one external examiner appointed by COE/Principal.

3) SEE marks for the project shall be awarded using appropriate Rubrics based on the quality of work and report, presentation skills, and viva-voce in the ratio 60:20:20 respectively.

24RNBE A4.2. SEE Assessment in Specific Courses

24RNBE A4.2.1. Theory courses with 4, 3 and 2 credits

The SEE for theory courses shall be conducted by the Institution as per the scheduled time-table put up by the Controller of Examinations. The question paper shall be common for students appearing for a particular course. The duration of examination shall be three hours.

1) The question paper will have ten questions. Each question is set for 20 marks. The medium of the question paper shall be ENGLISH unless otherwise it is mentioned.
2) There will be two questions from each module. Each of the two questions under a module (with a maximum of 3 sub-questions), shall have a mix of topics under that module.
3) The students have to answer 5 full questions, selecting one full-question from each module.
4) Marks scored will be proportionally scaled down to 50 marks.

24RNBE A4.2.2. Integrated Professional Core Courses (IPCC)

For a course wherein, theory is integrated with laboratory course, the SEE duration for the theory part shall be three hours, as specified in clause 24RNBE4.3. However, the question paper in the SEE examination shall include at least one question from the laboratory component.

24RNBE A4.2.3. Theory Course with 1 Credit

The SEE question paper shall have 50 MCQs (Multiple Choice Questions) set for one mark each. The time duration for SEE shall be two hours.

24RNBE A4.3. Consolidation of General Assessment and Evaluation regulations for theory and lab courses

The following tables indicate the details of assessment and evaluation in theory and lab courses.

4-Credit Lab Integrated Theory Courses (IPCC)

Assessment Type	Maximum Marks	Minimum Passing Marks	Evaluation Details
CIE- IA Tests (A)	20	8	Average of Three Internal Assessment Tests each of 50 marks, scaled down to 20 marks.
Continuous and Comprehensive Evaluation (B)	10	4	Any one Assessment methods as per 24RNBE4.2 scaled to 10 marks.
Total CIE Theory (A+B)	**30**	**12**	**Marks of Tests and Assignments awarded for a maximum of 30.**
CIE Practical	12	5	Marks awarded for Weekly Conduction of Experiments and Submission of Laboratory records, scaled to 12 marks.
CIE Practical Test	8	3	Average of marks of Two tests, each conducted for 100 marks covering all experiments, scaled to 8.
Total CIE Practical (C)	**20**	**8**	**Marks of Experiments, Record and Test awarded for a maximum of 20 marks.**
CIE: Theory + Practical (A + B + C)	**50**	**20**	**CIE Evaluation is done for a maximum of 50 marks.**
SEE (D)	**50**	**18**	**SEE is a theory exam, conducted for 100 marks and scaled down to 50 marks. Exam duration shall be for 3 hours.**
CIE+SEE (A+B+C+D)	**100**	**40**	**Final marks shall be the sum of marks scored in Components A, B, C and D**

- The minimum marks to be secured in CIE is 20 out of allotted 50 marks to appear for SEE, with minimum 40 % scored in every component of CIE. The laboratory component of the IPCC shall be for CIE only. However, in SEE, the questions from the laboratory component shall be included in their respective modules only.

2-, 3- and 4-Credit Theory Courses

Assessment Type	Maximum Marks	Minimum Passing Marks	Evaluation Details
CIE – IA Tests (A)	30	12	Average of Three Internal Assessment Tests each of 50 marks, scaled down to 30 marks.
Continuous and Comprehensive Evaluation (B)	20	8	Any two Assessment methods as per 24RNBE4.2 (*if it is project based, one assignment shall be given), scaled to 20 marks.
Total CIE (A+B)	**50**	**20**	**CIE Evaluation is done for a maximum of 50 marks**
SEE (C)	**50**	**18**	**SEE is a theory exam conducted for 100 marks and scaled down to 50 marks. Exam duration shall be for 3 hours.**
CIE + SEE (A+B+C)	**100**	**40**	Final marks shall be the sum of marks scored in Components **A, B and C.**

- The minimum marks to be secured in CIE is 20 out of allotted 50 marks to appear for SEE, with minimum 40 % scored in every component of CIE.
- If any courses of 3 credits are of Integrated Course type, for such courses the method suggested for 4 credits IPCC shall be followed.

1-Credit Lab Course

Assessment Type	Maximum Marks	Minimum Passing Marks	Evaluation Details
CIE Practical (A)	30	12	Marks awarded for Weekly Conduction of Experiments and Submission of Laboratory records, scaled to 30 marks.
CIE Practical Test (B)	20	8	Average of marks of Two tests, each conducted for 100 marks covering all experiments, scaled to 20.
Total CIE Practical (A+B)	**50**	**20**	**Sum of Marks of Experiments, Record and Test shall be CIE marks awarded for a maximum of 50.**
SEE (C)	**50**	**20**	**SEE is a lab exam, conducted for 100 marks and scaled down to 50 marks. Exam duration shall be for 3 hours.**
CIE + SEE (A+B+C)	**100**	**40**	Final marks shall be the sum of marks scored in Components **A, B and C.**

- The minimum marks to be secured in CIE is 20 out of allotted 50 marks to appear for SEE, with minimum 40 % scored in every component of CIE.

1-Credit Theory Course

Assessment Type	Maximum Marks	Minimum Passing Marks	Evaluation Details
CIE - IA Tests (A)	30	12	Average of Three Internal Assessment Tests (MCQs) each conducted for 30 marks.
Continuous and Comprehensive Evaluation (B)	20	8	Any two Assessment methods as per 24RNBE4.2, scaled to 20 marks.
Total CIE (A+B)	**50**	**20**	**CIE Evaluation is done for a maximum of 50 marks.**
SEE (C)	**50**	**18**	**Question papers having 50 MCQs with each question carrying 01 mark, and Exam duration shall be for 2 hours.**
CIE + SEE (A+B+C)	**100**	**40**	Final marks shall be the sum of marks scored in Components **A, B and C.**

- The minimum marks to be secured in CIE is 20 out of allotted 50 marks to appear for SEE, with minimum 40 % scored in every component of CIE.

Annexure-V

The regulations governing the Academic Bank of Credits (shall be framed)

Annexure-VI

Guidelines and Suggestive Activities under AICTE Activity Points (shall be framed)