

(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
S.P.G.Chidambara Nadar - C.Nagammal Campus
S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

# REVISED REGULATIONS: R-2021 (with effect from 29.10.2022)

### **CHOICE BASED CREDIT SYSTEM (CBCS)**

[Common to all B.E./ B.Tech. Degree Programmes]

#### Vision of the Institute

To make this Institution the unique of its kind in the field of Research and Development activities in this part of the world.

#### **Mission of the Institute**

To impart highly innovative and technical knowledge to the urban and unreachable rural student folks through "Total Quality Education"

# **Quality Policy**

Kamaraj College of Engineering and Technology is committed to impart Quality Technical Education imbibed with proficiency, human values, and continual improvement.

# KAMARAJ COLLEGE OF ENGINEERING AND TECHNOLOGY S.P.G.CHIDAMBARA NADAR - C.NAGAMMAL CAMPUS S.P.G.C.NAGAR, K.VELLAKULAM - 625 701 (NEAR VIRUDHUNAGAR), TAMILNADU

# REGULATIONS: R-2021 (Revised w.e.f. 29.10.2022) CHOICE BASED CREDIT SYSTEM (CBCS)

[Common to all B.E./B.Tech. Degree Programmes]

# DEGREE OF BACHELOR OF ENGINEERING / BACHELOR OF TECHNOLOGY

[(8 Semesters / 6 Semesters - Lateral Entry Scheme) Full-Time Programmes] (with effect from the academic year 2021 - 2022)

#### R1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this Regulation, unless the context otherwise specifies:

- i) "Degree" means that academic award conferred upon a student on successful completion of a programme designed to achieve the defined attributes. It is referred to as Under Graduate (UG) Degree that is B.E. / B.Tech. Degree.
- **ii) "Honours"** means a higher recognition awarded to a well performing UG student on earning the specific extra credits after satisfying the relevant Degree award conditions.
- **iii)** "Minor Degree" means academic award to a well performing UG student on earning extra credits for the courses offered in other programme or from a set of defined courses
- **iv)** "**Programme**" means the cohesive arrangement of courses, cocurricular and extracurricular activities to accomplish predetermined objectives leading to the awarding of a degree.
- v) "Course" means a Theory / Laboratory / Theory cum Laboratory / Laboratory cum Theory subject studied in a semester, like

- Mathematics, Engineering Practices Laboratory, Design of Machine Elements, etc.
- vi) "Principal" means the Head of the Institution.
- vii) "Dean (Academic Courses)" means the authority of the Institution who is responsible for all academic activities of the Departments for implementation of relevant Rules and Regulations.
- **viii) "Controller of Examinations"** means the authority of the Institution who is responsible for all activities of the examinations.
- ix) "HoD" means the Head of the Department concerned.
- **x)** "Chairperson, BoS" means the Chairperson of the Board of Studies of the Department concerned.
- xi) "University" means affiliating University i.e., Anna University, Chennai.
- xii) "Institution" means Kamaraj College of Engineering and Technology.
- xiii) "e-Resources" means learning materials saved electronically in online storage or cloud platform, which shall be accessed from anywhere and anytime online or shall be accessed offline by downloading the relevant materials.
- **xiv**) "MOOCs" means Massive Open Online Courses available at introductory and advanced levels accessible from "e-Resources".
- **xv)** "AICTE" means All India Council for Technical Education established at New Delhi.
- **xvi)** "UGC" means University Grants Commission established at New Delhi.

- **xvii)** "Academic Council" means the approval committee for academic related activities like framing academic policies, approval of courses, regulations, syllabi etc.
- **xviii)** "Executive Council" means the approval committee for systems and policies for the conduct of examinations and examination related activities.

#### **R2.** ADMISSION PROCEDURE

R2.1 Candidates seeking admission to the first semester of the eighth semesters B.E. / B.Tech. Degree Programme: Should have passed the Higher Secondary Examination of (10+2) Curriculum (Academic Stream) prescribed by the Government of Tamil Nadu with Mathematics, Physics and Chemistry as three of the four subjects of study under Part-III or any examination of any other University or authority accepted by the Syndicate of Anna University as equivalent there to.

(OR)

Should have passed the Higher Secondary Examination of Vocational stream (Vocational groups in Engineering / Technology) as prescribed by the Government of Tamil Nadu.

# **R2.2** Lateral Entry Admission

(i) The candidates who possess the Diploma in Engineering / Technology awarded by the State Board of Technical Education, Tamil Nadu or its equivalent are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. as per the rules fixed by Government of Tamil Nadu.

(OR)

(ii) The candidates who possess the Degree in Science (B.Sc.) (10+2+3 stream) with Mathematics as a subject at the B.Sc. Level are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. Degree Programmes. Such candidates shall undergo two additional Engineering courses in the third and fourth semesters as prescribed by the Department concerned.

#### **R3.** PROGRAMMES OF STUDY

The programmes currently being offered by the college, affiliated to Anna University and approved by AICTE, New Delhi are given in ANNEXURE-I. The recommended credit range for each programme is 165 to 170.

#### **R4.** STRUCTURE OF THE PROGRAMMES

### **R4.1** Categorization of Courses

Every B.E. / B.Tech. Programmes shall have a curriculum with syllabic comprising Theory, Theory integrated with Laboratory, Laboratory, and Laboratory integrated with Theory courses. The courses shall be categorized as follows:

# i) Foundation Courses

- a) Humanities and Social Sciences including Management courses (HS) include Technical English, Professional English, Engineering Ethics and Human Values, Communication skills and Management courses.
- b) Basic Science courses (BS) include Mathematics,
  Physics, Chemistry, Biology, Environmental Sciences, etc.
- c) Engineering Science courses (ES) include Engineering Practices, Engineering Graphics, Basics of Electrical /

Electronics / Mechanical / Computer Engineering, Instrumentation etc.

- **ii) Professional Core courses (PC)** include the core courses relevant to the chosen programme.
- **Professional Elective courses** (PE) include the elective courses relevant to the chosen programme.
- **Open Elective courses (OE)** shall provide an opportunity to study a course from any discipline that includes the courses relevant to the chosen specialization, the courses that enhance soft and managerial skills, the courses a student can choose from the curriculum of other B.E. / B. Tech. programmes and the courses offered by the Department of Science and Humanities.
- v) Employability Enhancement courses (EM) include Project Work, Internship, Career Development Skills, Creative and Innovative Project, Coding Techniques, Seminar, Professional Practices, Industry and Higher Institute Learning Interaction, Value Education, Case Study and Industrial / Laboratory Training.
- vi) Online courses (OL) allow the students to habituate independent learning through Massive Open Online Courses (MOOCs) restricted to NPTEL SWAYAM only.
- vii) Audit courses (AU) expose the students to Unnat Bharath Abhiyan, Constitution of India, Essence of Indian Knowledge, Traditional Yoga, English for Research Paper Writing, Pedagogy Studies, Stress Management and Personality Development through Life Enlightenment Skills, Heritage tamil and Tamils of Technology.
  This category is a mandatory non-credit course for students.

There shall be a certain minimum of Core courses and a sufficient number

of Elective courses that can be opted by the students. The blend of different

courses shall be so designed that the student, at the end of the programme, would have been trained not only for his/her relevant professional field but also would have developed as a socially conscious human professional.

Every branch of the B.E. / B.Tech. Degree Programme will have a curriculum and syllabi for the courses approved by the Academic Council.

# **R4.2.** Personality and Character Development

All students shall enroll, on admission, in any one of the personality and character development programmes (NCC / NSS / NSO / YRC) and undergo training for about 80 hours and attend a camp of about seven days. The training shall include classes on hygiene and health awareness and also training in first-aid.

- **R4.2.1** National Cadet Corps (NCC) will have about 20 parades.
- **R4.2.2 National Service Scheme (NSS)** will have social service activities in and around the College / Institution. The activities will include Laboratory projects on recycling and reusing biodegradable and dry waste.
- **R4.2.3** National Sports Organization (NSO) will have sports, games, drills and physical exercises.
- **R4.2.4** Youth Red Cross (YRC) will have activities related to social services in and around the College / Institution.

While the training activities will normally be during weekends, the camp will normally be during the vacation period.

Apart from the above, the students may enroll for Professional Societies / EDC etc.,

**R4.2.5** Every student shall put in a minimum of 75 percent attendance in the training and attend the camp compulsorily. The training and camp shall be completed during the first year of the programme. However, the Dean (Academic Courses) may permit a student to complete this requirement in the second year for valid reasons.

# **R4.3** Mandatory Induction Programme

Students are expected to undergo a mandatory induction programme comprising of physical activity, creative arts, universal human values, proficiency modules, lectures by eminent people, visits to local areas and familiarization to department / branch & innovations immediately after admission.

# **R4.4** Number of courses per semester

The curriculum of a semester shall generally have a blend of 5 to 7 lecture based courses and laboratory courses not exceeding 4 including Employability Enhancement course(s). However, the total number of courses per semester shall not exceed 10.

# **R4.4.1** Course Coding Scheme

- (i) Six alpha-numeric characters have been used to represent course codes.
- (ii) The first two characters represent the Department code (SH, CE, EE, EC, ME etc.,)
- (iii) The third character represents the regulation (1- 2020; 2- 2021 etc.,)
- (iv) The fourth character is the number representing the category as given below:
  - 1 First Year
  - 2 Second Year
  - 3 Third Year
  - 4 Fourth Year

- 7 Open Elective courses
- 8 Online courses
- 9 Professional Elective courses
- (v) The last two digits represent the unique identification code, where the numbers 01 to 49 represent courses in the odd semester; the numbers 51 99 represent courses in the even semester.

The department codes of various UG degree programmes are given below:

Sl.No.	Name of the Department	Department Code
1.	English	SH
2.	Mathematics	MA
3.	Physics	PH
4.	Chemistry	CY
5.	General Engineering/ Management Studies	GE
6.	B.E. – Computer Science and Engineering	CS
7.	B.E. – Electronics and Communication Engineering	EC
8.	B.Tech. – Information Technology	IT
9.	B.E. – Electrical and Electronics Engineering	EE
10.	B.Tech. – Biotechnology	BT
11.	B.E. – Mechanical Engineering	ME
12.	B.E. – Civil Engineering	CE
13.	B.E. – Mechatronics Engineering	MT
14.	B.Tech. – Artificial Intelligence and Data Science	AI

# **R4.5** Credit Assignment

Each course is assigned a certain number of credits based on the following:

Contact Period per week	Credits
1 Lecture (L) Period	1
1 Tutorial (T) Period	1
2 or 3 Laboratory (P) Periods (Laboratory / EM Courses like Seminar / Project work / Case Study etc.)	1
4 Laboratory (P) Periods (Laboratory / EM Courses like Seminar / Project work / Case Study etc.)	2

# **R4.6** Industrial Training / Internship

- R4.6.1 Students should undergo Industrial training for a period as specified in the Curriculum during summer / winter vacation. In this case, the training has to be undergone continuously for the entire period. Students should undergo an Internship at a Research organization / University / Industry after due approval from the Dean (Academic Courses) during the summer / winter vacation, in lieu of Industrial training.
- R4.6.2 The student is expected to submit a report to the Head of the Department, and the report shall be evaluated by a team of faculty members nominated by the Head of the Department. Based on the recommendations, the student will be awarded credits and the results will be sent to the Controller of Examination for further processing. A student is allowed to undergo a maximum of 6 weeks or three months of Industrial Training / Internship during the entire duration of study. The credits earned in this category apart from curriculum recommendations will be considered as over and above the total credit requirement. The credits are distributed as follows:

Duration of Industrial training / Internship	Credits
2 weeks	1
4 weeks	2
6 weeks	3

Note: One week = 40 internship hours

#### **R4.7** Industrial Visit

Every student is expected to undergo one industrial visit every year starting from the second year of the programme with the approval of the Head of the Department and Principal. The Heads of Departments shall ensure that necessary arrangements are made in this regard.

#### **R4.8** Value Added Courses

The students may optionally undergo value added courses offered by experts from industries / other institutions (Academic / Research) / institution faculty on specialized topics and earn credits as per curriculum. Every 15 period course will be given 1 credit. The value added course may be a Theory or Laboratory. The courses shall be conducted without affecting the regular academic schedule.

- R4.8.1 Candidates can complete such courses from the third to eighth semesters as and when these courses are offered by the departments.
- R4.8.2 A candidate will also be permitted to register for such courses offered by other departments.
- R4.8.3 The Department / Course in-charge / Faculty / Expert concerned shall conduct one assessment at the end of the course.

- R4.8.4 The Head of the Department shall form a committee to monitor the progress of the course.
- R4.8.5 Candidates can take a maximum of two one-credit courses / one two- credit course during each semester if offered.
- R4.8.6 Credits earned under this category will be over and above the total credit requirement as prescribed in the Employability Enhancement Courses category excluding the actual credits required for project works

#### **R4.9** Online Courses

- R4.9.1 Students may optionally permitted to enroll for online courses (which are provided with a certificate/ Grade card) with the approval of the Head of the Department concerned and the Dean (Academic Courses) subject to a maximum of six credits during the entire programme.
- R4.9.2 The Head of the Department shall form a committee to recommend the list of online courses from NPTEL / SWAYAM for approval to the Dean (Academic Courses).
- R4.9.3 The successful completion of online course of 3 credits shall be considered instead of one :Professional Elective course (upon student request). In such case, The Head of the Institution shall form a three member committee with members as HOD and a faculty member from the Department of the student, HOD of any other branch of the Institution to ensure that the student has not studied such courses and would not repeat it again as Professional Core/Professional Elective/Open Elective courses.

#### **R4.10** Audit Courses

A student may like to acquire more knowledge by attending a course but may not be interested in the routine evaluation process. In such cases, the candidate can choose an audit course.

- R4.10.1 Students can register for audit courses from the third to seventh semester.
- R4.10.2 It is mandatory to register for at least 2 courses listed in vide Clause R4.1 (vii) during the entire programme.
- R4.10.3 For an audit course, students should get approval from the course instructor and the Head of the Department.
- R4.10.4 To complete the audit course, students should earn a minimum of 75 percent attendance.
- **R4.11** The medium of instruction is English for all courses, examinations, seminar presentations and project / thesis / dissertation reports.

### **B.E.** / **B.Tech.** Honours / Minor Degree

### **R5.1** B.E. / B.Tech. (Honours) Degree Programme

Honours is a specialized degree that focuses on the area of the students' interest, which encourages advanced levels of study. Honours qualification enhances professional development and facilitates to gain recognition at the time of graduation for advanced and distinguished work contributed by the undergraduate students.

"Honours" Degree shall be awarded to well performing UG students on earning 18 extra credits (6 additional courses) in the same programme after after satisfying the relevant degree award conditions.

# **R5.1.1** Eligibility and Honours Degree award Criteria

Every student of the Institute intending to register for the "Honours" qualification shall fulfill the following academic requirements

- a. Registration to "Honours" qualification shall start from fifth semester onwards.
- b. Students should have obtained CGPA of 7.5 and above at the end of 4<sup>th</sup> semester is eligible to register for Honours degree.
- c. The students should earn additional 18 credits by registering the courses offered in their respective programme verticals. The student can opt any 6 courses from same or different verticals offered in the respective programme.
- d. All the additional course works should be completed within the minimum prescribed time for the award of the degree.
- e. Honours degree will be awarded for the students who have the overall CGPA of 7.5 and above at the end of programme (including the additional courses for Honours degree),
- f. Honors degrees will only be given to students who completed all of the courses in their programme of study on their first attempt (including the courses for Honours degree),

# **R5.2** B.E. / B.Tech. (Minor) Degree Programme

A minor is a specialised degree that focuses on an area of interest to the student. This encourages students to study in more than one field. Minor qualifications help with professional growth and make it easier to get credit for cross-disciplinary work done by undergraduate students when they graduate.

"Minor" Degree shall be awarded to well performing UG students on earning 18 extra credits from the courses of other Programme Particular verticals offered for minor degree or courses offered as minor degree after satisfying the relevant degree award conditions.

# **R5.2.1** Eligibility and Minor Degree award Criteria

Every student of the Institute intending to register for the "Minor" qualification shall fulfill the following academic requirements

- a. Registration to "Minor" qualification shall start from fifth semester onwards.
- b. Students should have obtained CGPA of 7.5 and above at the end of 4<sup>th</sup> semester is eligible to register for Minor degree.
- c. The students should earn additional 18 credits by registering the courses offered as minors from other programme verticals or courses offered for Minor degree. The student can do 6 such courses for Minor degree.
- d. All the additional course works should be completed within the minimum prescribed time for the award of the degree.
- e. Minor degree will be awarded for the students who have the overall CGPA of 7.5 and above at the end of programme (including the additional courses for Minor degree),
- f. Minor degrees will only be given to students who completed all of the courses in their programme of study on their first attempt (including the courses for Minor degree),

### **R5.3** Procedure for Honours / Minor Degree

i. Any student who meets the eligibility criteria specified above and intends to register for the "Honours / Minor Degree" qualification shall apply to the Institute through HoD in a prescribed form along with the

- prescribed application fee within 15 days after notification by the Institute.
- ii. There will be no limit on the intake of students for registration for "Honours / Minor Degree" qualification.
- iii. Notification for approved registrants will be notified by the Principal within a week after application.
- iv. If registered, the students shall pay one-time non-refundable registration fee as prescribed by the Institute to confirm the registration.
- v. Student attendance (vide clause R8) is not mandatory for the courses registered for Minor / Honours Degree
- vi. The student should earn continuous assessment Mark (vide clause R10.5) for the registered courses of Minor / Honours Degree and appear for the end semester examination.
- vii. Students registered for Minor / Honours degree can also opt equivalent Online course as prescribed in the curriculum (vide clause 4.9). The Head of the department should produce the course equivalence for the registered course (Minor / Honours degree) to the Dean (Academic courses) with proper permission from the Head of the Institution.

#### **R6. DURATION OF THE PROGRAMME**

- R6.1 A student is ordinarily expected to complete the B.E. / B.Tech. Degree Programme in 8 semesters (four academic years) but in any case not more than 14 Semesters (seven academic years) for HSC (or equivalent) candidates and not more than 12 semesters (six academic years) for lateral entry candidates.
- **R6.2** Each semester shall normally consist of 90 working days or 540 periods of 50 minutes each. The Dean (Academic Courses) shall ensure that every teacher imparts instruction as per the number of periods / hours specified in

the syllabus and that the teacher delivers the full content of the specified syllabus for the courses being taught.

- **R6.3** The Dean (Academic Courses) may permit additional classes for improvement, special coaching etc., over and above the specified periods.
- **R6.4** The end semester examination will ordinarily follow after the last working day of the semester as per the academic schedule prescribed from time to time.
- R6.5 The total period for completion of the programme reckoned from the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in Clause vide R6.1 irrespective of the period of Break of Study (vide Clause R14) or prevention (vide Clause R8.6) so that the candidate may be eligible for the award of the Degree (vide Clause R13).

#### **R7.** COURSE ENROLLMENT AND REGISTRATION

#### The courses that a student registers in a semester include

- i. Courses of the current semester (including Mandatory non-credit courses).
- **ii.** Course(s) in which they have not been permitted to appear for the end semester examinations for want of the minimum required attendance, if such courses are offered in that semester (vide Clause 8.3).
- **iii.** Professional or Open elective course(s) opted by the student's in lieu of courses in which he/she has failed, if the courses are offered in that semester or the same elective course chosen earlier by the student.
  - iv. Project work in the VII/ VIII semester as per curriculum.
  - **v.** The student wishes to register for any other course(s) as per norms (Vide Clause 4.6, 4.8, 4.9, and 4.10, 5).

- **R7.1** Each student, on admission, shall be assigned a Faculty Advisor (vide Clause R9), who shall advise and counsel the student about the details of the academic programme and the choice of courses, considering the student's academic background and career objectives.
- **R7.2** Each student on admission shall register for all the courses prescribed in the curriculum of the first semester of study.
- R7.3 Except for the first semester, registration of courses for a semester will commence ten days before the commencement of classes of the current semester. The candidate should choose the choice of their electives in consultation with their Faculty Advisor. Late registration will be permitted with a fine amount as prescribed by the Institute for two weeks from the last date specified for registration.
- R7.4 Students shall enroll for the courses with the guidance of the Faculty Advisor. If the student wishes, the student may drop or add courses (vide Clause R7.7) within five working days after the commencement of the concerned semester and complete the registration process duly authorized by the Faculty Advisor.
- **R7.5** After registering for a course, the student should attend classes, satisfy attendance requirements (vide Clause R8), earn continuous assessment marks and appear for the end semester examinations.
- R7.6 The candidate will be eligible for enrollment only if he / she has cleared all the dues to the Institute such as Hostel fees, Library due, Laboratory breakages etc., of the previous semester and paid all required prescribed fees for the current semester, provided he / she is not debarred from the Institute on account of disciplinary matters.

# **R7.7** Flexibility to Add or Drop courses

- **R7.7.1** A student has to earn the total number of credits specified in the curriculum of the chosen programme of study in order to be eligible to obtain the degree. However, the student is permitted to earn more than the total number of credits prescribed in the curriculum of the programme. In such cases, the minimum number of credits required for the completion of the programme would be considered for CGPA calculation.
- **R7.7.2** From the third semester onwards, each student has to register for all the courses in the curriculum of the respective semester (with the facility to drop courses to a maximum of 8 credits). Dropping of courses shall be decided as per the prerequisite requirement in consultation with the Faculty Advisor.
- **R7.7.3** In case, the student fails to secure a pass in an elective course, he / she shall be allowed to opt for a change in elective and register for the same and do attend the classes to meet the criteria stated in Clause R8 and the elective in which the student had failed shall not be listed in the Grade Sheet.

#### **R7.8** Professional Elective

- **R7.8.1** The curriculum of each programme consists of 6 to 7 professional elective courses. The professional elective courses are grouped under different verticals (Column wise). Each vertical shall have 7 Professional elective courses.
- **R7.8.2** Students are permitted to choose all the Professional Electives from a particular vertical or from different verticals offered in the curriculum of the programme concerned. Further, only one Professional Elective course shall be chosen in a semester horizontally (row wise). However, two courses are

Permitted from the same row, provided one course is enrolled in Semester V and another in semester VI

**R7.8.3** For an elective to be offered, at least 15 students should register for that course subject to the approval of the Head of the Department.

# **R7.9** Reappearance Registration

- R7.9.1 If a student fails in a Theory / Laboratory / Theory integrated with Laboratory/ Laboratory integrated with Theory courses, the student shall do reappearance registration for all the arrear courses in the subsequent semester and appear for the end semester examination. The continuous assessment marks earned by the candidate are valid for the first arrear attempt only.
- R7.9.2 If the course in which the student has failed is a professional elective or an open elective, the student will be permitted to register for the same or any other professional elective or open elective in the subsequent semesters and shall appear for the end semester examination. If a student registers for the same professional / open elective, then the continuous assessment marks are valid as per Clause 7.9.1. If a student registers for any other professional / open elective, he / she has to attend the classes and fulfil the attendance requirements (vide Clause R8), earn continuous assessment marks and appear for the end semester examination.
- **R7.9.3** Students are not eligible to reappear for the course that they have already passed in a semester for improvement of Grade / Marks.

# **R7.10** Redoing a Course

Redoing a course means reregistering for a course, attending all classes, fulfilling the attendance requirements as per Clause R8, earning fresh continuous assessment marks and appearing for end semester examinations.

A student has to redo a course under the following conditions:

- **R7.10.1** If a student is prevented from writing the end semester examination due to lack of attendance, the student has to register for the courses of that semester again when offered next and redo the semester.
- **R7.10.2** If a student is prevented from writing the end semester examination, he / she can opt to register for a different professional / open elective course while rejoining the course and attend classes, fulfill the attendance requirements as per Clause R8, secure continuous assessment marks and appear for end semester examinations.
- **R7.10.3** If the course in which the student fails to secure a pass even after one arrear attempt is a professional / open elective course, then the student can opt for a different professional / open elective course, register for the same when it is offered, attend classes, fulfill the attendance requirements as per Clause R8, secure continuous assessment marks and appear for end semester examinations.
- **R7.10.4** The student who fails in any Project work shall register for the course again, when offered next, and redo the course. In this case, the student shall attend the reviews and fulfill the attendance requirements as per Clause R8.
- **R7.10.5** The student who fails in Seminar / Technical Seminar shall register for the same in the subsequent semester and redo the course.

# R8. REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATIONS

A student who has fulfilled the conditions, vide Clause R8.3 and Clause R8.4 shall be deemed to have satisfied the attendance requirement for appearing for the end semester examination.

- **R8.1** All students must attend every lecture, tutorial and Laboratory classes every semester.
- **R8.2** Attendance record will be maintained based upon roll calls (or any equivalent operation) in every scheduled lecture, tutorial and laboratory class. The Faculty Advisor will maintain and consolidate the attendance record for all the courses (lectures, tutorials and Laboratory together, as applicable).
- R8.3 Ideally every student is expected to attend all the periods and earn 100 percent attendance. However, in order to give provision for certain unavoidable reasons such as medical / participation in sports, the student is expected to attend at least 75% of the classes. Therefore, all students shall secure not less than 75% (after rounding off to the nearest integer) of overall attendance as calculated below.

% Attendance = 
$$\frac{Total\ No.of\ periods\ in\ all\ courses\ per\ semester \times 100}{No.of\ \frac{periods}{week}}$$
 as prescribed in curriculum ×15

R8.4 If a student secures attendance between 65 percent and less than 75 percent in the current semester, due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events, with prior permission from the Head of the Department concerned, the student shall be given exemption from the prescribed attendance requirement and the student shall be permitted to appear for the end semester examination. In all such cases, the students should submit the required documents on joining after the absence to the Head of the Department through the Faculty Advisor and approval by Dean (Academic Courses).

- **R8.5** A student shall normally be permitted to appear for the end semester examination if the student has satisfied the attendance requirements (Clauses 8.3 and 8.4) and has registered for the examination of that semester by paying the prescribed fee.
- **R8.6** Students who do not satisfy Clauses 8.3 and 8.4 or who secure less than 65 percent attendance will not be permitted to write the end semester examination. The student has to register and redo all the courses when they are offered next as per Clause R7.10. If the course in which the student has been prevented is a professional / open elective, the student can opt to redo the same course or opt for different professional / open elective course as per Clause 7.10.2.
- **R8.7** If a student has shortage of attendance, he / she would not be permitted to move to the higher semester and has to repeat the current semester in the subsequent year.
- **R8.8** In case of reappearance (arrear) registration for a course, the attendance requirement as mentioned in Clauses R8.3 and R8.4 is not applicable. However, the student has to register for the examination in that course by paying the prescribed fee.
- **R8.9** If the student needs leave for a short duration (less than two weeks), prior application for the leave has to be submitted to the Head of the Department concerned stating the reasons for the leave requested along with supporting documents and such leave may be granted by the Head of the Department.
- **R8.10** Absence for the period not exceeding two weeks in a semester due to sickness or any other unavoidable reasons for which prior application could not be made may be permitted by the Head of the Department provided the given explanation is acceptable.

- R8.11 If the period of absence is likely to exceed two weeks, a prior application for grant of leave will have to be submitted through the Head of the Department to the Dean (Academic Courses) with supporting documents. In such cases, the decision to grant leave shall be taken by the Dean (Academic Courses) on the recommendation of the Head of the Department.
- **R8.12** A student who is absent due to illness or any other emergency, up to a maximum of two weeks, should approach the Faculty Advisor / Course Coordinator for completing assignments and laboratory work.
- **R8.13** In case, the period of absence on medical grounds is more than 23 working days during the semester, the student may apply for withdrawal from the semester, i.e. withdrawal from all courses registered in that semester.
- **R8.14** If a student is continuously absent from the Institute for more than four weeks without any notification to the Dean (Academic Courses), his / her name will be removed from the Institute rolls.

# R9. FACULTY ADVISOR / MENTOR / TUTOR & CLASS ADVISOR/ CHAIRPERSON

R9.1 There shall be a Class Advisor for each class. The Class Advisor/Chairperson is a faculty member preferably who is not handling the class. He / She will be appointed by the Head of the Department concerned. The Class Advisor is the ex-officio member and the Convener of the class committee.

The responsibilities for the Class Advisor shall be:

• To act as the channel of communication between the HoD and the students of the respective class.

- To collect and maintain various details such as attendance, assessment marks and long leaves particulars.
- To convene the class committee meetings.
- To monitor the academic performance of the students including attendance and to inform the class committee.
- To coordinate with each instructor in performing analysis of results of continuous assessments and end semester examinations and in estimating COs –POs-PSOs attainment.
- To guide in the process of enrollment and registration of the courses.
- To support the students' welfare activities like awards, medals, scholarships and industrial visits.

### **R9.2** Faculty Advisor

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department of the students will attach a certain number of students to a teacher of the Department, who shall function as Faculty Advisor for those students throughout their period of study. The Faculty Advisor shall advise the students in registering and reappearance (arrear) registering of courses, authorize the process, monitor their attendance and progress and counsel them periodically. If necessary, the Faculty Advisor may also discuss with or inform the parents about the progress / performance of the students concerned. The responsibilities of the faculty advisor shall be:

- To inform the students about the various facilities and activities available to enhance the student's curricular and co-curricular activities.
- To guide in the process of enrollment and registration of the courses.
- To authorize the final registration of the courses at the beginning of each semester.

- To advise the students in their career development / professional guidance
- To monitor the academic and general performance of the students including attendance and to counsel them accordingly.
- To collect and maintain the academic and co-curricular records of the students.

# **R9.3** Class Committee

A class committee consists of teachers of the class concerned, student representatives and a chairperson who is not handling the class. It is like the 'Quality Circle' (more commonly used in industries), with the overall goal of improving the teaching-learning process.

The functions of the class committee include:

- Solving problems experienced by students in the classroom and in the laboratories in consultation with the Head of the Department / Dean (Academic Courses).
- Clarifying the Regulations of the degree programme and the details of rules therein.
- Informing the student representatives about the academic schedule including the date of assessments and the syllabus coverage for each assessment.
- Informing the student representatives, the details of Regulations regarding weightage used for each assessment.
- Discussing in the class committee meeting the breakup of marks for each experiment / exercise / module of work, in case of Laboratory courses (laboratory / project work / seminar, etc.) and informing the students.
- Collecting the opinions on curricular / cocurricular activities of the

programme concerned from student members.

- Analyzing the performance of the students of the class after each assessment and finding ways and means of improving the performance of the students.
- Identifying the students who are low achievers or weak in their subjects if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such students.

The class committee is normally constituted by the Head of the Department. However, if the students of different branches are mixed in each class, the class committee is to be constituted by the Dean (Academic Courses). The class committee shall be constituted within a week from the date of commencement of a semester. At least 4 student-representatives from the respective class (usually 2 boys and 2 girls) shall be included in the class committee. The Chairperson of the class committee may invite the Faculty Advisor(s) and the Head of the Department to the meeting of the class committee. The Dean (Academic Courses) may also be invited to participate in any class committee meeting. The Chairperson of the class committee is required to prepare the minutes of every meeting, submit the same to the Head of the Department within two days of the meeting and arrange to circulate the same among students concerned and teachers. If there are some points in the minutes requiring action by the Institute, the same shall be brought to the notice of the Principal.

The first meeting of the class committee shall be held within fifteen days from the date of commencement of the semester. Two or three subsequent meetings in a semester may be held at suitable intervals. The Chairperson of the Class Committee shall put on the Notice Board the cumulative attendance particulars of each student at the end of every such meeting to enable the students to know their attendance details to satisfy the Clause 8 of this Regulation. During these meetings the student members representing

the entire class, shall meaningfully interact and express their opinions and suggestions of the class students to improve the effectiveness of the teaching-learning process. In each meeting, the action taken report based on the minutes of the previous meeting is to be presented and discussed by the Chairperson of the class committee.

#### **R9.4 COMMON COURSE COMMITTEE**

Each common theory course offered to more than one discipline or group of disciplines, shall have a "Common Course Committee" comprising all the instructors teaching the common course with one of them nominated as Course Coordinator. The nomination of the Course Coordinator shall be made by the Dean (Academic Courses) in consultation with Heads of Departments duly approved by the Principal, from among the instructors teaching the common course either from a single department or several departments. The "Common Course Committee" shall meet as often as possible and ensure uniform evaluation of continuous assessments after arriving at a common scheme of evaluation for the tests. The common course committee shall prepare a common question paper for the test(s) and end semester examinations.

### **R9.5.** PERFORMANCE ANALYSIS COMMITTEE

The Performance Analysis Committee will consist of the Principal, Dean (Academic Courses), IQAC Coordinator, Head of the Department and internal / external member from an allied department as nominated by the Principal. The meeting of the Performance Analysis Committee is to be held within ten days after the declaration of results. This meeting shall be conducted after Internal / End Semester Examination. This committee shall analyze the performance of the students in all courses of study by comparing continuous assessment and end semester examination results, COs–POs-PSOs attainment levels for each course, verification of class

records of each course etc. The compliance report of the performance analysis committee will be forwarded to IQAC for further discussions and approval. The Performance Analysis Committee, by collective wisdom, should ensure that the clustering / grading / pass—fail decisions have been reasonably balanced.

#### R10. SYSTEM OF EXAMINATION

The End Semester Examinations for Theory, Theory integrated with Laboratory, Laboratory integrated with theory, Laboratory and Project courses will be of 3 hours duration and shall normally be conducted between October and December during the odd semesters and between April and June during the even semesters. For Laboratory, Laboratory integrated with Theory, and Project courses, the end semester examination will be conducted with the external examiner appointed by the Controller of Examinations.

### **R10.1** Assessment Procedures for Awarding Marks

All B.E. / B.Tech. Programmes consist of Theory, Theory integrated with Laboratory, Laboratory Integrated with Theory Courses and Employability Enhancement Courses. Employability Enhancement Courses include Project Work, Seminar, Professional Practices, Case Study and Industrial / Laboratory Training, Skill Development Courses / Value Added Courses. Appearance in End Semester Examination is mandatory for all courses including Theory, Theory integrated with Laboratory, Laboratory, and Laboratory integrated with Theory courses and Project work.

Performance in each course of study shall be evaluated based on:

- i) Continuous Assessments throughout the semester and
- ii) End Semester Examination

R10.2 Each course - Theory, Theory Integrated with Laboratory, Laboratory, Laboratory Integrated with Theory and Project work shall be evaluated for a maximum of 100 marks. The weightage for continuous assessment marks and End semester examination marks are given below,

	Category of	Marks				
S.No.	Course	Continuous Assessments	End Semester Examination			
1.	Theory Courses	40 %	60 %			
2.	Laboratory Courses	60 %	40 %			
3.	Theory Integrated with Laboratory Courses	Assessment through Theory – 25 % Assessment through Laboratory- 25 % Total – 50 %	Theory – 50 %			
4.	Laboratory Integrated with Theory Courses	Assessment through Theory – 25 %  Assessment through Laboratory - 25 %  (Total – 50 %)	Laboratory – 50%			
5.	Project Work	60 %	40 %			
6.	Other Employability Enhancement Courses	100 %				

R10.3 All other courses included under Employability Enhancement Courses are evaluated by internal assessments only. There is no evaluation for Audit Courses. However, minimum attendance requirements as per Clause R8 shall be satisfied.

ASSESSMENT RECORD' for every semester, which consists of attendance marked in each class of Theory / Theory Integrated with Laboratory / Laboratory, Laboratory Integrated with Theory / Employability Enhancement courses / Audit courses the assessment marks and the record of class work (topics covered), separately for each course handled by the teacher. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of assessment marks and attendance. The Head of the Department will affix his / her signature and date after due verification. At the end of the semester, the record should be verified by the Dean (Academic Courses) who shall keep this document in safe custody (for five years). The records of attendance and assessment of both current and previous semesters should be available for academic audit / Inspection.

# **R10.5** Assessment for Theory Courses

- **R10.5.1** The End Semester Examinations for theory courses will be of 3 hours duration and shall normally be conducted between October and January during the odd semesters and between April and June during the even semesters.
- R10.5.2 Continuous Assessment comprises of three assessments of each 100 marks.

  Apart from this three assessments, the course instructor should conduct assessments which may be a mini project or any combination of conducting Quizzes / Assignments / Tutorials / Seminar / Online test as decided by the respective Course Instructor.
- R10.5.3 In case a student misses the assessment due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Competitions /

NSS / NCC camps with prior permission from the Head of the Department, only one reassessment may be given at the end of the semester after getting approval from the Principal by the concerned Head of the Department and the Course Instructor.

**R10.5.4** The assessment (cycle test) will be conducted as per schedule given in the academic calendar. Each test carries a maximum of 50 marks and will be conducted for a duration of 90 Minutes. Internal marks shall be calculated by considering the average of best two Internals.

Intern	al Assessment 1	Internal	Assessment 2	<b>Internal Assessment 3</b>		
Cycle test1	mini project/Quizzes / Assignments / Tutorials/ eminar / Online test etc.,	Cycle test 2	mini project / Quizzes / Assignments / Tutorials / Seminar / Online test etc.,	Cycle test 3	mini project / Quizzes / Assignments / Tutorials / Seminar / Online test etc.,	
60 %	40 %	60 %	40 %	60%	40%	

The weighted average mark is converted into 40 marks as internal assessment

# R10.6 Assessment for Theory Integrated with Laboratory Courses and Laboratory Integrated with Theory Courses

Each Theory integrated with Laboratory courses or Laboratory integrated with Theory courses shall be evaluated for a maximum of 100 marks as shown below,

L	T	P	C	Internal A	End Semester Assessment	
1	0	4	3	Laboratory (25%)	Theory (25%)	Laboratory (50%)
1	0	2	2	Laboratory (25%)	Theory (25%)	Laboratory (50%)
2	0	2	3	Theory (25 %)	Laboratory (25%)	Theory (25%) Laboratory (25%)
3	0	2	4	Theory (25 %)	Laboratory (25%)	Theory (35%) Laboratory (15%)
2	0	4	4	Theory (25 %)	Laboratory (25%)	Theory (15%) Laboratory (35%)

The Procedure for the conduct of Theory and Laboratory assessment are given vide clause R10.5.4 and R10.7.3 respectively. For Theory integrated with Laboratory courses or Laboratory integrated with Theory, end semester examinations will be conducted for the Theory part. The Appointment of External Examiner for the Laboratory part will be decided by the Controller of Examination.

# **R10.7** Assessment for Laboratory Courses

- R10.7.1 Every laboratory exercise / experiment shall be evaluated based on the student's performance during the laboratory class and the maintenance of laboratory records.
- R10.7.2 There shall be at least one model examination for laboratory courses.
- R10.7.3 Internal mark shall be calculated by considering the continuous assessment and model examination. The formula for calculating the internal mark for laboratory is given below

Internal Mark = 75% from continuous assessment + 25 % Model exam Mark

The weighted average mark is converted into 60 marks as internal assessment

# **R10.8** Assessment for Project Work

- **R10.8.1** The student shall register for Project Work as per the respective programme curriculum. Project work may be allotted to a single student or to a group of students not exceeding 4 per group. For each Project work, out of 100 marks, the maximum marks for continuous assessment is fixed as 60 and the end semester examination (project report evaluation and viva-voce examination) carries 40 marks.
- R10.8.2 There shall be three assessments (each 30 marks) during the semester by a review committee. The student shall make presentation about the progress made before the committee. The Head of the Department shall constitute a review committee for each programme. There shall be a minimum of three members in the review committee. The committee shall consist of the supervisor, project coordinator and domain expert. The total marks obtained in the three reviews shall be reduced to a maximum of 60 marks rounded to the nearest integer. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Principal and suitable record of the meetings shall be maintained.
- R10.8.3 The student(s) is expected to submit the project report on or before the last working day of the semester. The end semester examination for the project work shall consist of the evaluation of the final project report submitted by the student or students of the project group by an external examiner, followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner and an internal examiner (other than the project guide). The project coordinator shall be the internal examiner. The end semester examination will be conducted with the internal examiner (Project Coordinator) and the External Examiner appointed by the Controller of Examinations.

**R10.8.4** The continuous assessment and viva-voce examination marks for project work will be distributed as indicated below:

Continuous Assessment (60 % Marks)							End Semester Examination (40 Marks)				
Review I (30 Marks)		Review II (30 Marks)		Review III (30 Marks)		Project Report Evaluation (20 Marks)		Viva-Voce Examination (20 Marks)			
PC	M	G	PC	M	G	PC	M	G	EX	EX	IE
10	10	10	10	10	10	10	10	10	10	10	10

(PC - Project Coordinator; M - Member; G - Guide; IE - Internal Examiner, EX - External Examiner)

R10.8.5 If the project report is not submitted on or before the specified deadline, an extension of time up to a maximum limit of 30 days may be given for the submission of project work with due approval obtained from the Dean (Academic Courses) and the same needs to be communicated to Controller of Examinations. If the project report is not submitted even beyond the extended time, then the student(s) is deemed to have failed in the Project Work.

R10.8.6 A student may, however in certain cases, be permitted to work on the project in an Industrial / Research Organization on the recommendation of the Head of the Department, with the approval from the Dean (Academic Courses). In such cases, the project work shall be jointly supervised by a faculty member (supervisor) of the department and an Engineer / Scientist from the organization and the student shall be instructed to report the progress periodically and to attend the project review for evaluating the progress. The student will produce a certificate of attendance from the Industry / Research organization where the project is carried out.

#### **R10.9** Assessment for Seminar / Professional Practices

The Seminar / Professional Practices / Case study / Mini-Project / Design and Fabrication Project shall carry 100 marks and shall be evaluated through continuous assessment only. Every student is expected to present a minimum of two presentations / demonstration per semester before the evaluation committee and for each presentation / demonstration, marks can be equally apportioned. The three member committee consisting of one coordinator and two members appointed by the Head of the Department will evaluate the performance of the students in the above activities. At the end of the semester, the marks shall be consolidated and taken as the final mark. Evaluation shall be based on the seminar paper / report (40 marks), presentation / demonstration (40 marks) and response to the questions asked during presentation / demonstration (20 marks). The final marks obtained by each student in all the above activities should be consolidated and submitted by the concerned Head of the Department to the Office of Dean (Academic Courses) which in turn should be submitted to the Controller of Examinations with due approval from Principal at the end of each semester. Evaluation of the Mini-Project / Design and Fabrication Project should be done similar to the project work evaluation process.

# R10.10 Assessment for Industrial / Laboratory Training / Internship / Summer Project

The Industrial / Laboratory Training shall carry 100 marks and shall be evaluated through continuous assessment only. At the end of the Industrial / Laboratory Training / Internship / Summer Project, the student shall submit a certificate from the organization where the student has undergone training and a brief report about the training. The evaluation will be made based on this report (40 marks), presentation (30 marks) and a Viva-Voce Examination (30 marks). The viva- voce examination will be conducted by a three member committee constituted by the Head of the Department. The

committee comprises one expert from an industry / organization and two members (a co-coordinator and a member) from the Department. Certificates (issued by the Organization) of the student along with his/her mark statement should be submitted by the concerned Head of the Department to the Office of Dean (Academic Courses) which in turn should be submitted to the Controller of Examinations with due approval from the Head of the Institution at the end of each semester.

#### **R10.11** Assessment for Value Added Courses

Candidates can take a maximum of two one credit courses / one two credit courses during each semester if offered. This one / two credit course shall carry 100 marks and shall be evaluated through continuous assessments only. One or Two assessments shall be conducted during the semester by the department concerned. The Head of the Department may identify a faculty member as the coordinator for the course. A committee consisting of the Head of the Department, course-in-charge (if available), coordinator and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The grades shall be assigned to the students by the above committee based on their absolute marks. Certificates (issued by the Industry) of the student along with his/her mark/grade statement should be submitted by the concerned Head of the Department to the Office of Dean (Academic Courses) which in turn should be submitted to the Controller of Examinations with due approval from the Principal at the end of each semester.

#### **R10.12** Assessment for Online Courses

Students may be permitted to enroll for online courses (NPTEL/Swayam) with the approval of the respective Head of the Department and Dean (Academic Courses), subject to a maximum of six credits.

- **R.10.12.1** On successful completion of the 3 credit online course, the student has to submit the copy of the certificate and the grade card (if applicable) to the Head of the Department.
- R10.12.2 The Head of the Department shall form a team of faculty members to recommend the credit and grade to be awarded to the candidate by mapping the score earned by the student and results shall be submitted to the Office of Dean (Academic Courses) which in turn should be submitted to the Controller of Examinations for further processing with due approval from the Principal.
- **R10.12.3** If the grade card is not submitted by the student, the Head of the Department shall recommend the same to the Controller of Examination through the Dean (Academic Courses) with approval from the Principal to conduct end semester examination for the online course.
- R10.12.4 For the students those who have registered for Minor / Honours degree, the clause vide R10.12.3 is not applicable and the student must produce the grade card from NPTEL or Swayam to the Head of the Department. Grades are awarded to the students as per clause (vide R10.12.2)

## R10.13 ANNOUNCEMENT OF INTERNAL MARKS

Internal marks approved by the Dean (Academic Courses) and Principal shall be displayed to students by the respective HODs within 5 days from the last working day and the same should be communicated to the Controller of Examinations.

## **R11. PASSING REQUIREMENTS**

R11.1 A student who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester University Examinations]

with a minimum of 45% of the marks prescribed for the end-semester University Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for theory, theory integrated with Laboratory, laboratory and Laboratory integrated with theory courses (including project work).

- **R11.2** If the student gets less than 50 percent of total marks, then the student will be awarded Reappearance grade.
- R11.3 Students are allowed to write arrear examination as per vide Clause 7.9.1. If a student fails to secure a pass in a course even after one arrear attempt, internal marks of that particular course will be nullified and the student has to pass by earning the full 50 percent marks purely in the end semester examination in the subsequent semesters.
- R11.4 If a candidate fails in the seventh semester examination for Project Phase 1, he / she has to resubmit the Project Report within 30 days from the date of declaration of the results. If he / she fails in the final project phase of B.E. / B.Tech., he / she shall resubmit the Project Report within 60 days from the date of declaration of the results. The resubmission of the project report and the subsequent viva-voce examination will be considered as reappearance with payment of exam fee. In case, a student fails in the resubmission of a project report and subsequent viva-voce examination, the student shall register for the course again, when offered next.
- R11.5 The passing requirement for the courses which are assessed only through internal assessment (Employability Enhancement courses except project work), shall be fixed as minimum 50 percent and the rest of the grades are decided (vide Clause R12.1).

## R12. AWARD OF LETTER GRADES

R12.1 The award of letter grades will be decided using relative grading principle. The performance of a student will be reported using letter grades, each carrying certain points as detailed below:

Letter Grade	Grade Significance	Grade Points
О	Outstanding	10
A+	Excellent	9
A	Very Good	8
B+	Good	7
В	Average	6
С	Satisfactory	5
U	Reappearance	0
SA	Shortage of Attendance	0
WD	Withdrawal	0

The relative grading is applicable to ONLY those students who have passed the examination as per the passing requirements enumerated above. For those students who have not passed the examination, Reappearance (U) shall be awarded. For those students who have passed the course, the relative grading shall be done. The marks of those students who have passed only shall be inputted in the software developed for relative grading. The evolved relative grading method normalizes the results data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each student. For a given course, if the students strength is greater than 30, the relative grading method shall

be adopted. However, if the students strength is less than or equal to 30 then the fixed grading shall be followed with the grade range as specified below.

Letter Grade	Grade Significance	Grade Points	Marks Range
О	Outstanding	10	91-100
A+	Excellent	9	81-90
A	Very Good	8	71-80
B+	Good	7	61-70
В	Average	6	56-60
С	Satisfactory	5	50 - 55
U	Reappearance	0	<50
SA	Shortage of Attendance	0	0
WD	Withdrawal	0	0

- i) "U" denotes Reappearance required for the examination in the course and "WD" denotes withdrawal from the course.
- ii) The Grade "SA" denotes inadequate attendance (as per Clause R8) and hence prevented from writing the end semester examination.
- iii) The Grade "U", "SA' and "WD" will figure only in the Result Sheets.
- R12.2 For the Co-curricular activities such as NCC / NSS / NSO / YRC, a Satisfactory / Not Satisfactory grading will appear in the mark sheet.
  Every student shall put in a minimum of 75 percent attendance in the

training and attend the camp compulsorily. A Satisfactory grade in the above co-curricular activities is compulsory for the award of degree.

R12.3 The over and above credit courses and Audit courses will be figured in the mark sheet under the title Value Added Courses / Online Courses / Audit Courses. The other grades U, SA and WD will not figure in the final consolidated mark sheet.

## R12.4 GRADE SHEETS

- **R12.4.1** After the results are declared, Grade Sheets will be issued to each student, which will contain the list of courses enrolled for that semester and the grades obtained by the student.
- R12.4.2 The Grade Point Average (GPA) for each semester will be calculated only for the students who have passed all the subjects of that semester. Similarly, Cumulative Grade Point Average (CGPA) up to any semester will be calculated only for the students who have passed all the subjects up to that semester. GPA is the ratio of the sum of the products of the number of credits of a course (Ci) and the grade points scored in that course (GPi), taken for all the courses, to the sum of the number of credits of all the courses (n) in the semester.

$$GPA = \frac{\sum_{i}^{n} C_{i} \times GP_{i}}{\sum_{i}^{n} C_{i}}$$

Where n is the number of courses in that semester.

On successful completion of the programme, the CGPA will be calculated as follows:

$$CGPA = \frac{\sum_{i=1}^{N} C_i \times GP_i}{\sum_{i=1}^{N} C_i}$$

Where N is the total number of courses for the entire programme

## R12.5 REVALUATION OF ANSWER SCRIPTS

A candidate can apply for photocopy of his / her semester examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examination through the Head of Department. Students can see the valued answer scripts of the semester examinations and can get it retotalled / revalued by the faculty concerned. Based on the recommendation, the candidate can register for the revaluation through proper application to the Controller of Examination. The answer sheets will be revaluated and the results will be intimated to the candidate concerned through the Head of the Department. Revaluation is not permitted for Laboratory courses, project work and Employability Enhancement courses.

### R13. ELIGIBILITY FOR THE AWARD OF DEGREE

- **R13.1** A student shall be declared to be eligible for the award of the B.E. / B.Tech. Degree provided the student has:
  - i) Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.
  - Successfully completed the course requirements, appeared for the End Semester Examinations and passed all the subjects prescribed in all the 8 semesters within a maximum period of 7 years reckoned from the commencement of the first semester (6 years reckoned from the commencement of the third semester in case of lateral entry scheme) to which the candidate was admitted.

- iii) Successfully passed any additional courses prescribed by the Dean (Academic Courses).
- iv) Successfully completed the NCC / NSS / NSO / YRC requirements.
- v) No disciplinary action is pending against the student

# **R13.2** Classification of the Degree Awarded

## R13.2.1 B.E. / B.Tech. Honours Degree

"Honours" Degree shall be awarded to well performing UG students on earning the specific additional credits as prescribed under vide Clause R5.1.1 and satisfied the requirement (vide Clause R5.1.1) and after satisfying the relevant degree award conditions.

The Principal of the Institute shall submit the list of students who are eligible for the award of the "Honours" degree along with the total credits earned by each student to the affiliating University. The list shall be validated by the Faculty Advisors of the students under consideration and endorsed by the Head of the Department / Dean (Academic courses) / Controller of Examination.

If the students registered for "Honours" degree qualification cannot meet the requirement as stated in Vide Clauses R5.1.1, they shall not be considered for the award the award of "Honours" degree. However, they shall be awarded only B.E. / B.Tech. degree. The additional grades earned from the successful completion of additional courses will be printed in the grade sheet under over and above catagory.

# R13.2.2 B.E. / B.Tech. Minor Degree

"Minor" Degree shall be awarded to UG students on earning the specific additional credits as prescribed under vide Clause R5.2.1. and satisfied the requirement (vide Clause R5.2.1) and after satisfying the relevant degree award conditions.

The Principal of the Institute shall submit the list of students who are eligible for the award of the "Minor" degree with necessary documents along with the total credits earned by each student to the affiliating University. The list shall be validated by the Faculty Advisors of the students under consideration and endorsed by the Head of the Department / Dean (Academic courses) / Controller of Examination.

If the students registered for "Minor" degree qualification cannot meet the requirement as stated in Vide Clauses R5.2.1, they shall not be considered for the award the award of "Minor" degree. However, they shall be awarded only B.E. / B.Tech. degree. The additional grades earned from the successful completion of additional courses will be printed in the grade sheet under over and above category.

## **R13.2.3** First Class with Distinction

A student who satisfies the following conditions shall be declared to have passed the examination in First class with Distinction:

- i) Should have passed the examination in all the courses of all the eight semesters in first appearance within five years (four years in case of lateral entry students), which includes authorized break of study of one year. Withdrawal from examination (vide Clause R15) will not be considered as an appearance.
- ii) Should have secured a CGPA of not less than 8.50.

iii) Should not have been prevented from writing end semester examination due to lack of attendance in any of the courses.

The authorized break of study (vide Clause R14) and withdrawal from the examination (vide Clause R15) will not be counted as an attempt.

## R13.2.4 First Class

A student who satisfies the following conditions shall be declared to have passed the examination in First class:

- i) Should have passed the examination in all the courses of all eight semesters within five years (four years in case of lateral entry students), which includes one year of authorized break of study (if availed) or prevention from writing the End Semester Examination due to lack of attendance (if applicable).
- ii) Should have secured a CGPA of not less than 6.50.

The authorized break of study (vide clause R14) and withdrawal from the examination (vide clause R15) will not be counted as an attempt.

## R13.2.5 Second Class

All other students (not covered in Clauses R13.2.3 and R13.2.4) who qualify for the award of the degree (vide Clause R13.1) shall be declared to have passed the examination in Second Class.

**R13.2.6** A student who is absent in the end semester examination in a course / project work after having registered for the same shall be considered to have appeared in that examination (except approved withdrawal from end semester examinations as per Clause R15) for the purpose of classification.

# R14. PROVISION FOR AUTHORISED BREAK OF STUDY

- **R14.1** Break of Study shall be granted by the Dean (Academic Courses) only once for valid reasons for a period of maximum one year during the entire period of study of the degree programme.
- R14.2 The prescribed fee to the Institute should be paid during the "Break of Study "period.
- R14.3 The candidate permitted to re-join after the break shall be governed by the Curriculum and Regulations in force at the time of re-joining. If the Regulation is changed, then, those candidates may have to take up additional courses as prescribed by the Dean (Academic Courses).
- **R14.4** The authorized break of study (for a maximum of one year) will not be counted for the duration specified for passing all the courses for the purpose of classification. (Vide Clause R13.2).
- R14.5 The total period for completion of the programme reckoned from the commencement of the first semester (third semester for Lateral Entry Scheme) to which the candidate was admitted shall not exceed the maximum period specified in Clause R6.1 irrespective of the period of break of study (vide Clause R14.4) in order that he / she may be eligible for the award of the degree.
- R14.6 If any student is detained for lack of the required attendance, progress and good conduct, the period spent in that semester shall not be considered as permitted 'Break of Study 'or 'Withdrawal' (Clause R14.4 or R15) is not applicable for this case.
- R14.7 If the candidate has not reported back to the department, after the break of study, his / her name shall be deleted permanently from the college enrollment. Such candidates are not entitled to seek readmission under any circumstances.

# R15. PROVISION FOR WITHDRAWAL FROM THE END SEMESTER EXAMINATIONS

- R15.1 A candidate may, for valid reasons and on prior application, be granted permission to withdraw from appearing for one examination of one course or two or more consecutive examinations of different courses in the end semester examination. Permission cannot be given to withdraw from the examinations in a non-consecutive sequence
- **R15.2** Such withdrawal shall be permitted only once during the entire period of study of the degree programme.
- **R15.3** Withdrawal application is valid only if it is made within 10 days prior to the commencement of the end-semester examination and recommended by the Head of the Department and approved by the Dean (Academic Courses).
- **R15.4** Notwithstanding the requirement of mandatory 10 days' notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.
- **R15.5** Withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction. This provision is not applicable to those who seek withdrawal during the eighth semester.
- **R15.6** Withdrawal from the end semester examination is NOT applicable to arrears subjects of previous semesters.
- R15.7 The candidate shall appear for the end semester examination with respect to the withdrawn courses during the examination conducted in the subsequent semesters and need not reappear for the continuous assessment examination.
- **R15.8** Withdrawal from the continuous assessment examination is not permitted.

**R15.9** Withdrawal is not permitted to the student who has not satisfied the conditions prescribed in Clause R8 as requirements for appearing in the end semester examination

## **R16. DISCIPLINE**

The Institute reserves the right to cancel the admission of any student and ask him / her to discontinue his / her studies at any stage of his / her career on the grounds of unsatisfactory academic performance or misbehaviour and conduct.

- **R16.1** Every student is required to observe discipline and decorous behaviour both inside and outside the college and not to indulge in any type of activity which will tend to bring down the prestige of the institution.
- R16.2 Any act of indiscipline of a student reported to the Dean (Academic Courses) will be referred to a Discipline and Welfare Committee constituted by the Head of the Institution. The Committee will enquire into the charges and recommend suitable punishment if the charges are substantiated. The Head of the Institution will consider the recommendation of the Discipline and Welfare Committee for appropriate action.
- **R16.3** If a student indulges in malpractice in any of the end semester examination / continuous assessment test, he / she shall be liable for punitive action as prescribed by the institution from time to time.
- R16.4 Ragging of any dimension is a criminal and non-bailable offence in our country. The current State and Central legislations provide for stringent punishment, including imprisonment. Once the involvement of a student is established in ragging, the offending student will be dismissed from the Institution and will not be admitted into any other Institution. Avenues also exist for collective punishment, if individual cannot be identified in this

inhuman act. Every student of the Institute, along with the parent, shall give an undertaking every year in this regard and this should be submitted at the time of enrollment.

## R17. REVISION OF REGULATIONS AND CURRICULUM

The Academic Council of the Institute reserves the right to revise, amend or change the regulations, the curriculum, syllabi and the scheme of examinations from time to time if found necessary and shall send the recommendations to the Governing Body for approval.

### R18. SPECIAL CASES

In the event of any clarification in the interpretation of the above regulations, they shall be referred to the Standing Committee. The Standing Committee will offer suitable interpretation / clarification required for special case on such references and get them ratified in the next meeting of the Academic Council. The decision of the Academic Council is final.

Annexure – I

<u>Details of B.E./B.Tech Degree Programmes</u>

		Credits	
Sl. No.	UG Departments	2021 - 2025 Batch UG	2022 - 2026 Batch UG onwards*
1.	B.E. Computer Science and Engineering	167	169
2.	B.E. Electronics and Communication Engineering	166	168
3.	B.E. Electrical and Electronics Engineering	168	170
4.	B.E. Mechanical Engineering	167	169
5.	B.E. Civil Engineering	165	167
6.	B.E. Mechatronics Engineering	166	168
7.	B.Tech. Information Technology	164	166
8.	B.Tech. Biotechnology	167	169
9.	B.Tech. Artificial Intelligence and Data Science	168	170