

K.S. RANGASAMY COLLEGE OF TECHNOLOGY
(An Autonomous Institution affiliated to Anna University, Chennai and approved by AICTE, New Delhi)
TIRUCHENGODE- 637215



REGULATIONS 2022

CHOICE BASED CREDIT SYSTEM
Common to All B.E./B.Tech. Programmes
(Academic year 2022-2023 onwards)

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(i)

K.S. RANGASAMY COLLEGE OF TECHNOLOGY, TIRUCHENGODE- 637 215

(An Autonomous Institution, Affiliated to Anna University, Chennai and approved by AICTE, New Delhi)

Vision

To produce the most competent Scientists, Engineers, Technologists, Entrepreneurs, Managers and Researchers through quality Education.

Mission

To achieve academic excellence in Science, Engineering, Technology, Management and Research through objective and innovative teaching methods; dedicated and duty conscious faculty; continual and consistent updation of facilities; welfare and quality improvement of the faculty and a system of continual process improvement.

B.E./B.Tech. REGULATIONS 2022

These Regulations are applicable to the candidates admitted to B.E./B.Tech. Programme from the academic year 2022-2023 onwards.

The regulations for the B.E./ B.Tech Degree program are prepared with the recommendation, guidelines and directions from the National Knowledge Commission, University Grants Commission (UGC) and All India Council for Technical Education (AICTE) on:

- (a) Outcome Based Education Framework (OBE)
- (b) Evaluation Reforms in Higher Education Institutions in India
- (c) Examinations Reform Policy
- (d) National Education Policy

In addition to the above documents, the best practices of KSRCT such as promoting enhanced learning and research capabilities through (a) Critical Thinking (b) Problem Solving (c) Analytical Reasoning (d) Scientific Reasoning (e) Reflective Thinking (f) Design thinking etc., are integrated into the Curricula.

Degree of Bachelor of Engineering / Technology

I. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- i. University** means the Affiliating University, i.e. Anna University, Chennai.

- ii. **College** means K.S.Rangasamy College of Technology, Tiruchengode, an Autonomous Institution affiliated to Anna University, Chennai and approved by AICTE, New Delhi.
- iii. **Programme** means Degree Programme (i.e.) B.E. / B.Tech. Degree Programme.
- iv. **Discipline** means specialization or Branch of B.E. / B.Tech.(Hons.), B.E./B.Tech. Minor Degree Programme.
- v. **Course** means a theory / theory cum practical / practical subject that is offered in a semester, like Basic Electrical Engineering, C Programming and Fabrication and Reverse Engineering Laboratory, etc.
- vi. **Credit** means the weightage given to each course to describe the candidate's workload required per week and it is used to compute the Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) of the student.
- vii. **Grade** means the letter grade assigned to each course based on the marks range specified.
- viii. **Grade Point** means a numerical value (0 to 10) allocated based on the grade assigned to each course.
- ix. **Head of the Institution** means the Principal of the Institution.
- x. **Controller of Examinations (CoE)** means the authority of the Institution who is responsible for all activities of the Semester Examinations of the Institution.
- xi. **Department** means the team of faculty members who are responsible for a program of study.
- xii. **Head of Department / BoS Chairman** means the person who is heading a particular department.

2. **ADMISSION PROCEDURE**

The candidates for seeking admission to the B.E./B.Tech degree programme for first semester and lateral entry for third semester will be required to satisfy the conditions of admission there to prescribed by the Anna University, Department of Technical Education, Government of Tamil Nadu with 65% admission of sanctioned intake through Government Quota and 35% admission of sanctioned intake through management Quota and 10% admission of sanctioned intake through lateral entry. AICTE supports 5% of admission through Tuition Fee Waiver Scheme, 5% of admission through Non-Resident Indian(s)(NRI) category. Also, AICTE supports admission of over and above 15% of the approved intake for Foreign Nationals / Overseas Citizen of India (OCI) / Children of Indian Workers in Gulf Countries / UGC.

2.1 **First Year Admission**

Candidates seeking for admission to the first semester of the eight

semesters B.E./B.Tech. degree programme should have passed the Higher Secondary Examinations of (Academic10+2) Curriculum 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)

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

2.2 Lateral Entry Admission

- (i) 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 the lateral entry admission to the third semester of B.E./B.Tech. degree programme as per the rules fixed by Government of Tamil Nadu.

(OR)

- (ii) The candidates who possess B.Sc. degree (10+2+3 stream) with mathematics as one of the subjects at the B.Sc. level from a recognized University are eligible for admission to the third semester of the B.E./B.Tech. degree programme through the lateral entry scheme. Such candidates shall undergo two additional Engineering course(s) in the third and fourth semesters as prescribed by the College.

2.3 Notwithstanding the qualifying examination the candidate might have passed, the candidate shall also appear for Tamil Nadu Engineering Admissions counselling conducted by Anna University, Chennai.

2.4 The candidate seeking admissions under the management quota should also have passed the qualifying examination as per clause 2.1 and are admitted based on the rank given by the Consortium of Self-Financing Professional, Arts and Science colleges in Tamil Nadu.

2.5 The eligibility criteria regarding marks shall pertain to the norm as prescribed by the State Government / Syndicate of the Anna University / AICTE / UGC from time to time.

3. PROGRAMMES OFFERED

The following B.E./B.Tech. (4 Years) degree programmes are offered by the college, affiliated to Anna University, Chennai, and AICTE, New Delhi, as in Table 1.

Table 1: Programmes Offered

Sl. No.	Branch Code	Name of the Branch
1.	ME	B.E. - Mechanical Engineering
2.	EE	B.E. - Electrical and Electronics Engineering
3.	EC	B.E. - Electronics and Communication Engineering
4.	CS	B.E. - Computer Science and Engineering
5.	MC	B.E. - Mechatronics Engineering
6.	CE	B.E. - Civil Engineering
7.	AM	B.E. - CSE (Artificial Intelligence and Machine
8.	EV	B.E. - Electronics Engineering (VLSI Design and Technology)
9.	IT	B.Tech - Information Technology
10.	TT	B.Tech - Textile Technology
11.	BT	B.Tech – Biotechnology
12.	FT	B.Tech - Food Technology
13.	AD	B.Tech - Artificial Intelligence and Data Science
14.	CB	B.Tech - Computer Science and Business Systems

4. STRUCTURE OF THE PROGRAMME

4.1. Categorization of Courses

Every B.E / B.Tech Programme shall have a curriculum comprising of theory, theory-cum-practical, practical courses with well-defined syllabi as prescribed by the respective Board of Studies (BoS) and Academic Council of the college from time to time. The courses that shall be categorized as follows:

- a. Humanities and Social Sciences (HS) include Professional English, Communication skills etc.
- b. Basic Science Courses (BS) include Mathematics, Physics, Chemistry, Biology, Environmental Studies and Climate Change etc.
- c. Engineering Science Courses (ES) include Engineering Practices, Engineering Graphics, Basics of Civil / Mechanical / Electrical / Electronics / Instrumentation, Computer Engineering, etc.
- d. Professional Core Courses (PC) include the core courses relevant to the chosen specialization/branch.
- e. Professional Elective Courses (PE) include the elective courses relevant to the chosen specialization/ branch. Professional Elective courses are offered under verticals (specialisation groups).
- f. Open Elective Courses (OE) include the courses offered by a branch to other branches, from the list specified in the respective curriculum of the B.E. / B. Tech. Programmes.
- g. Career Guidance Courses (CG) include Project Work, Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training etc.
- h. Mandatory courses (MC) include the courses such as Languages, Well-being, etc.

- i. Audit Courses (AC) include the courses such as Research Skill Development
- j. Soft Skills Development Courses (SS) include courses for communication Skill
- k. One Credit Courses (OC) include advanced courses other than in curriculum
- l. Self-study Courses (SS) include courses in curriculum with faculty mentor for guidance rather than facilitating the course.

There shall be a certain minimum number of core courses and enough elective courses that can be opted by the students. A blend of different courses is designed in all the programmes, so that the students will be trained not only in his/ her relevant professional field but also would have been groomed as a socially conscious human being at the end of the programme.

4.2 Personality and Character Development

All students may enroll, on admission, in any one of the personality and character development programmes NCC/NSS/NSO/YRC and undergo training / conduct activities 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. Alternately, activities of science, literature and arts also help for personality and character development. So, students shall conduct and participate actively in Science club / Literary Forum/Fine Arts activities for 80 hours and participate in at least ONE event.

National Cadet Corps (NCC) will have about 20 parades.

National Service Scheme (NSS) will have social service activities in and around the College / Institution.

National Sports Organization (NSO) will have Sports, Games, Drills and Physical exercises.

Youth Red Cross (YRC) will have activities related to social services in and around College/Institution.

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

Science club shall organise activities of popularisation of science and scientific temper through activities related to astronomy, works of great scientists from India and abroad, observing National Science Day, etc.

Literary Club like 'Tamil Ilakkiya Mandram' shall be formed, which shall organize colourful literary events to propagate good humanist values, morals and ethics reflected in the literature.

Fine Arts Club like music, painting and documentary films with social themes shall be encouraged.

Students who enroll and take active participation in anyone of the above activities for 80 hours and participate at least one event/programme will be given a certificate by the Head of the Institution and the copy of the same shall be forwarded to the Controller of Examinations for the purpose of record and scrutiny. No fee shall be charged for all these activities.

4.3 Student Induction Programme

The students shall undergo induction programme related to creative arts, Universal Human Values, Lectures by eminent people, visits to local areas and familiarization of departments after admission.

Insertion of
New clause
4.3

- i. Induction Programme is mandatory for the students pursuing the Undergraduate Programme.
- ii. List of students who have successfully completed the Induction Programme shall be certified by the Head of the Institution.
- iii. The completion of the Induction Programme shall be printed in the Grade Sheet as "COMPLETED".
- iv. In the case of students who have got admitted later and those who have not attended the Induction Programme at the time of joining the degree programme, it shall be conducted later and on completion, it shall be recorded in the grade sheet.
- v. No fee will be charged towards the conduct of the Induction Programme and for including in the STATEMENT OF GRADES for the successful completion of the Induction Programme.

4.4 Number of courses per semester

Each semester curriculum shall normally have a blend of lecture courses not exceeding 7 Theory courses and Laboratory integrated theory courses and 4 Employability Enhancement Course(s) and Laboratory Courses. However, the total number of courses per semester shall not exceed 10. Each Course shall have credits assigned as per clause 4.5.

4.5 Credit Assignment

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

Table 2: Credit Assignment

Contact period per week	Credits (C)
1 Lecture (L) Period	1
1 Tutorial (T) Periods	1
1 Laboratory Period (also for Career Guidance courses like Seminar, Project Work, etc)	0.5

4.6 Project Work

The student has to carry out project work as a part of his/her study in the final year as indicated in the curriculum of the respective programme either in department / industry in consultation with the concerned Head of the Department and the faculty guide. Project work may be allotted to a single student or to a group of students not exceeding 4 per group. Interdisciplinary and multidisciplinary / transdisciplinary projects are encouraged

The Project Work-II carried out in industry/academic/research institutions need not be a continuation of Project Work-I. In such cases, the Project Work-II shall be jointly supervised by a supervisor of the department and an expert as a joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and suitable record of the meetings shall be maintained.

The Head of the Institution shall constitute a review committee for Project Work for each programme. The review committee consists of supervisor, an expert from the Department and a project coordinator from the Department. If the project coordinator/expert member happens to be the supervisor, then an alternate member shall be nominated. In the case of Industrial Project, the review committee shall have the supervisor, the coordinator from industry and the project coordinator from the Department. The scheme of assessment is given in clause 14.4

A softcopy of the approved project report shall be kept in the library of the college and in the respective department.

4.7 Internship / Industrial Training

The students may undergo Internship/Industrial training during the summer/winter vacation (online / offline) with prior approval from the Head of the Institution. In this case, the Internship / Industrial Training has to be undergone by the students for at least continuous two weeks in an organization and credits shall be awarded as prescribed in the curriculum. Students are permitted to undergo internship in Industry / University / Research organization. The attendance certificate with the period of internship shall be forwarded to CoE. Credits shall be Internship given for students undergoing internship/doing projects in relevant industry as given below:

Table 3: Internship

Duration of Training/Internship	Credits
2 Weeks*	1
4 Weeks	2
6 Weeks & above	3

***1 Week = 40 Internship Hours**

- Students undergoing 6 weeks of internship / industrial training / doing projects in industry/academic institutions of repute shall be given 3 credits
- The evaluation shall be carried out based on the assessment by the industry/academic mentor (50%), report (25%) and viva–voce examination (25%).
- The viva–voce examination will be conducted internally by a three-member committee constituted by the HoD in consultation with the Head of the Institution.

4.7.1 Social Internship

The 100-hour experiential internship would require the candidate to visit one or more villages and conduct activities of their choice to contribute to the cause of rural sanitation in India. The students undergoing Swachh Bharat Summer Internship and social internship shall earn 3 credits in lieu of professional /open electives (Not consider for CGPA).

Amendment
of
Clause 4.7.1

4.8 Industrial Visit

Every student is permitted to go for at least one Industrial visit, starting from the 1st semester of the programme.

4.9 Open Elective and Language Elective Courses

Students shall be permitted to register for the open elective courses offered by other departments. Students shall also be permitted to register for language electives and shall waive 3 credit in lieu of professional elective courses/Open electives.

4.10 Value Added Courses

In order to promote students to gain Industrial exposure, the students shall undergo Value Added Courses (VAC) over and above the total credits requirements prescribed in the curriculum for the award of the degree. The courses with two / three credits shall be offered with the approval of Academic Council. The credits earned through the Value-Added Courses shall not be included in the credit requirements prescribed in the curriculum for the award of the degree.

4.11 Mandatory/Audit courses

The student shall undergo mandatory/audit courses and it will be mentioned in the Grade Sheet. However, it will not be considered for computation of CGPA.

4.12 Off Campus Courses - NPTEL/SWAYAM/MOOC

Students are permitted to optionally enroll and study a maximum of five off campus courses in physical/online/hybrid mode under each UG programme with the approval of Academic council. The successful completion of these courses through physical/online/hybrid mode shall be considered in lieu of professional elective / open elective courses of curriculum as approved by the Head of the Institution.

- 4.12.1** Students can register for online courses only with the permission of the Head of the Department. Online courses shall be taken under the guidance of a faculty mentor. Credits shall be given to the students who have passed the online courses offered by NPTEL/SWAYAM. Suitable credits shall be given after due approval from the committee consisting of Head of the Department, programme coordinator, module coordinator / class advisor and course coordinator in consultation with the Head of the Institution.

The number of credits awarded to NPTEL Courses are based on the procedure given in Table 4 and the mapping of the NPTEL marks with the grades is explained in Annexure I. List of elective courses to be waived should be submitted to CoE at the beginning of the semester after the approval from the Head of the Institution.

Table 4: NPTEL Courses with Credits

S.No.	No of Weeks	Number of Credits
1	4	1
2	8	2
3	12	3

- 4.12.2** In addition, students are permitted to optionally enroll and study the courses in physical / hybrid / online modes offered by Central / State funded Universities / Institutions with 20 positions in NIRF Ranking, and also, conducting examination towards awards of marks and grades. Universities in abroad in top 500 in QS Ranking in the last three years. Students are also permitted to study courses of a semester in a University / Institution abroad based on MoU. A learning agreement shall be made based on the courses offered in the programme and the courses offered in the abroad university approved by Academic council. The credits earned by the students shall be transferred as per the learning agreement.
- 4.12.3** Students are also permitted to enroll and study the courses in physical / Online / Hybrid mode that are offered by (i) National / State funded research institutions / laboratories and (ii) reputed companies related to the programme. The minimum experience of the course instructor from the company shall be B.E. / B.Tech with 10 years of research / industrial experience. The syllabus content, duration of the course and the number of credits shall be approved by Academic Council.

The course coordinator nominated from the department shall also attend the industry supported courses and coordinate in the Internal and End Semester Examination. However, the passing requirements are as per the regulations.

4.13 Self-study courses and International Certification Courses

Students shall be permitted to register for self-study course from VIth semester onwards under a faculty mentor in a semester provided that they do not have any standing arrears and should have completed all the dropped courses. The students who opt for dropping of courses are not permitted to pursue self-study courses in that semester. Study materials prepared by the faculty mentor and delivered to students. No formal lectures need to be delivered. However, the faculty mentor shall monitor the progress of the students on a weekly basis. Students shall write assignments/tutorials and appear for continuous assessment and end semester examinations to earn the credit. Students shall meet the faculty mentor once in a week. Students shall register for international certification courses offered by reputed national / International Organizations / Industries. The self-study courses shall be approved by the committee consisting of HoD, programme coordinator and module coordinators.

4.14 B.E. / B.Tech. (Hons) and B.E. / B.Tech. minor with specialisation in another discipline.

Amendment
of
Clause 4.14

(i) B.E / B.Tech. (Hons.)

- a. The students should have taken additional courses from a specified group of Professional Electives (vertical) or from any of the verticals of the same programme and earned a minimum of 18 credits.
- b. Should have passed all the courses prescribed in the curriculum and additional courses in the first attempt.
- c. Should have earned a minimum of 7.50 CGPA taking into account of all the courses prescribed in the curriculum and additional courses.

(ii) B.E./B.Tech. Minor with specialisation in another discipline

The student should have earned additionally a minimum of 18 credits in any one of the verticals offered from Engineering Disciplines / Science and Humanities / Management

1. For these 18 credits students can optionally enroll and study a maximum of 6 credits in online mode from SWAYAM-NPTEL platform (in addition to the three online courses permitted for courses of curriculum), as approved by the Academic Council.
2. B.E / B.Tech. (Hons.) and B.E./B.Tech. minor with specialisation in

another discipline will be optional for students and the students shall be permitted to select any one of them only.

3. For the categories 4.14 (i), the students, including Lateral Entry, shall be permitted to register for the courses from Semester V onwards provided the students have earned a minimum CGPA of 7.50 until Semester III and have cleared all the courses in the first attempt.
4. For the category 4.14 (ii), the students, including Lateral Entry, will be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III is CGPA 7.50 and above.
5. B.E/B.Tech. (Hons.) or B.E./ B.Tech. Minor shall be offered by the Department irrespective of the number of students enrolled.
6. If a student decides not to opt for Honours, after completing certain number of additional courses, such additional courses studied shall be considered instead of the Professional Elective courses which are part of the curriculum.

If the student has studied more number of such courses than the number of Professional Elective courses required as per the curriculum, the courses with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the grade sheet however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.

If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

7. If a student decides not to opt for Minor, after completing certain number of courses, the additional courses studied shall be considered instead of Open Elective courses which are part of the curriculum.

If the student has studied more number of such courses than the number of open electives required as per the curriculum, the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the grade sheet, however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.

If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

The student has to enroll for these additional courses separately and pay a tuition fee for studying these six additional courses and pay additional exam fee.

4.15 Employability Enhancement Skill Based Courses

Insertion
of
New Clause
4.15

Skill based experiential learning courses will be offered in two categories as purely Laboratory Based Courses and Theory Integrated Laboratory Courses with the following credits. One such course will be offered in every semester from V to VII.

Table 5: Employability Enhancement Skill Based Courses

Category	L	T	P	C
Laboratory Courses	0	0	4	2
	0	0	2	1
Theory integrated Laboratory Course	1	0	2	2

A student may accumulate up to 6 credits through such courses, and such credits will be considered in lieu of the Professional Elective and/or Open Elective courses.

These courses may be offered with the support of the identified firms/companies and with one course coordinator per course and a mentor from the firm.

Evaluation Procedure:

The evaluation of the above mentioned courses are fully internal and shall be jointly done by the course coordinator from the institution and the mentor from the firm.

(a) If the course involves certification from an identified firm/company, then 20% of the total marks will be included in the internal assessment marks, 30% will be included from the marks provided by the firm and 50% shall be evaluated by the respective Course Coordinators of the college by conducting appropriate theory and / or laboratory tests.

(b) If there is no certification from the firm/company, then 50% will be included from the marks provided by the firm and 50% shall be

evaluated by the respective Course Coordinators of the college by conducting appropriate theory and / or laboratory tests.

Procedure to drop Professional Elective / Open Elective course(s) and computation of Grade point

A student may accumulate up to 6 credits through such courses, and such credits will be considered in lieu of the Professional Elective and/or Open Elective courses. In this regard, a student is permitted to drop either 1 or 2 Professional Elective / Open Elective course(s) as per the procedure given below.

Table 6: Procedure to drop Professional Elective / Open Elective course(s)

No. of courses	Total No. of credits earned	Courses to be printed in the grade sheet	No. of Professional elective/open elective can be dropped	No. of credits considered for CPA/CGPA calculation
1	2	1	-	-
2	4	2	1	3
3	6	3	2	6

- The credits earned by the student of the successfully completed Skill Based Courses shall be recorded in the grade sheet.
- If a student has not successfully completed the skill based courses during the semesters V, VI and VII, then the same shall not be recorded in the grade sheet.
- If a student earns 2 credits in Semester V and then enrolls for another 2 credits in Semester VI, then he / she is permitted to drop one Professional elective/ open elective course in Semester VI. Further, if the student earns 4 credits upto Semester VI and enrolls for another 2 credits in Semester VII, then he/she is permitted to drop an additional professional elective/open elective course in the VII semester.

If the student has enrolled for skill-based courses but has not successfully earned 4 or 6 credits and also dropped 1 or 2 PE/OE courses in anticipation of pass, then he/she has to enroll the PE/OE (as the case may be) to meet the total credit requirements to earn the degree.

Method for computation of Grade point of dropped PE / OE courses

The method of Computation of Grade point for the dropped PE/OE courses is given below:

1. If a student has successfully completed two Skill Based Courses, then the computation of Grade point for one PE/OE course dropped in lieu of those two skill based courses is as follows.

Grade point = $(2 \text{ credits} * \text{higher grade point obtained} + 1 \text{ credit} * \text{lower grade point obtained}) / 3 \text{ credits}$.

For example, for two courses of two credit each, if the grades obtained are,

Course 1– C grade – 5 points

Course 2– O grade – 10 points

Then, the grade point of the dropped course for the calculation of CGPA is obtained as: $(1 \times 5 + 2 \times 10) / 3 = 8.33$.

One PE/OE course shall be dropped for 3 credits with grade point computed as above.

2. If a student has successfully completed three Skill Based Courses, then the computation of Grade point for dropping two PE/OE in lieu of those three skill based courses is as follows.

For three courses of two credit each

Computation of Grade point of each of the two dropped PE/OE courses for the calculation of CGPA = Average grade point of three skill-based courses.

Two PE/OE courses shall be dropped of 3 credits each, with grade point computed as above.

5 Medium of Instruction

The medium of instruction is English for all the course, for Examinations and Project Work reports.

6 DURATION OF THE PROGRAMME

The programme will lead to the degree of Bachelor of Engineering (B.E.) / Bachelor of Technology (B.Tech.) of the Anna University and is spread over a period of 4 years. The four academic years will be divided into 8 semesters with 2 semesters per year.

- 6.1** A HSC student is normally expected to complete the B.E. / B.Tech. Programme in 8 semesters (four academic years) but in any case not more than 14 consecutive semesters (7 years) whereas a Lateral Entry Diploma holder / B.Sc. graduate (10+2+3 stream) with mathematics as one of the courses is normally expected to complete the B.E. / B.Tech. Programme in 6 semesters (three academic years) but in any case not more than 12 consecutive semesters (6 years).
- 6.2** Each semester shall normally consist of 75 working days / 540 periods of 50 minutes each. The Head of the Institution shall ensure that every faculty imparts instruction as per the number of periods specified in the syllabus, covering the full content of the syllabus for the course being taught.
- 6.3** The additional classes for improvement, special coaching, model examination over and above period shall be conducted. However, it will not be accounted for calculation of attendance requirements. But for the purpose of calculation of attendance requirement for writing the end semester examinations (as per clause 7) by the students, following method shall be used.

$$\text{Percentage of Attendance} = \frac{\text{Total no. of periods attended in all the courses per semester}}{(\text{No. of periods / week as prescribed in the curriculum}) \times 15 \text{ taken together for all courses of the semester}} \times 100$$

- 6.4** The total duration for completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall not exceed the maximum duration specified in clause 6.1, irrespective of the period of break of study (vide clause 20), in order that the student may be eligible for the award of the degree (vide clause 18).

7. COURSE REGISTRATION

- 7.1** Each student must register for all courses to be taken in a given semester's curriculum (with the option of dropping up to 6 credits) (vide clause 7.2). Courses dropped in previous semesters can be registered in subsequent semesters if they are offered. The student's registration information must be approved by the Head of the Institution and forwarded to the Controller of Examinations. This registration includes both the course registration and its End Semester Examination. Students shall pay the course fees including the college fees before the commencement of the classes.

Amendment
of
Clause 7.1

The courses that a student registers in a particular semester may include

- i. Courses of the current semester.
- ii. Courses dropped in the lower semesters

The maximum number of credits that can be registered in a semester is 36. However, this does not include the number of Re-appearance (U) and Withdrawal (WD) courses registered by the student for the appearance of Examination.

7.1.1 Fast Track Courses

Students interested in “Project Internship” in industry or research during the 8th semester can do Fast Track courses of their 8th semester courses during the end of 7th semesters if they have no standing arrears and a minimum CGPA of 7.5.

7.1.2 Course waiver

Students are permitted to opt for course waiver for three one credit courses as per clause 14.6.2, NPTEL as per clause 4.12.1, Online courses as per clause 4.12.2, Industry supported courses as per clause 4.12.3, Social Internship as per clause 4.7.1, NCC with B-Certificate as per clause 4.2. International certification Courses as per clause 4.13. Students receiving awards/ Won contest shall also receive 3 Credits. Courses shall be waived in lieu of Professional / Open Electives. Maximum number credits permitted to be waived is 15 credits.

7.2 Flexibility to add or drop the courses

7.2.1 To be eligible for the award of degree, students must get the total number of credits specified in the curriculum of the respective programme of study. Students may, however, earn more credits than the total number of credits specified in the curriculum by enrolling in additional professional courses, open electives, self-study courses, one credit courses, and on-line courses. Students may register for one or two additional courses during the semester; however, the additional credit will not be used to calculate the overall CGPA.

7.2.2 Students enrolled in B.E./B.Tech. programmes may be permitted to drop one or two courses from the second to final semesters. Students must also complete all courses and earn the total credits required for the programme within the specified time frame (vide Clause 18.2). When dropped courses are re-registered, they are not considered as an attempt for classification in that semester. Total number of credits dropped in a semester shall not exceed six credits. Students must re-register for the dropped courses in the following semesters. However, the dropped course should not be a prerequisite for subsequent semester courses. A

student is permitted to drop the course(s) within 30 days of the commencement of the academic schedule.

- 7.2.3** From the V to VIII semesters, the student has the option of registering for additional courses in a semester. With regard to enrolling for B.E. / B. Tech. (Hons) or B.E. / B. Tech. Minor, the total number of credits that a student can add in a semester is limited to 6, subject to a maximum of 2 courses. Maximum number of credits enrolled in a semester (Honours and Minor) shall not exceed 36. The online courses registered for B.E. / B. Tech. (Hons.) and B.E. / B. Tech. minor shall be over and above this 36 credits.

7.3 Choice of Professional Elective Courses

The professional Elective Courses are listed in the Curriculum in Table format as verticals (Specialisation groups). A student can choose all the Professional Elective Courses either from one of the verticals or a combination of courses from all verticals in a semester. However, students irrespective of enrolling for additional courses for B.E. / B. Tech. (Hons.) are not permitted to choose more than one course from a row. Students are permitted to enroll more than one elective course from the same vertical in a semester. In the subsequent semesters students are permitted to enroll one more course in a row, provided if he/she has cleared the earlier course of the same row. For a professional elective course and open elective course, minimum number of students enrolment permitted shall be 10. However, the minimum number is not applicable for students enrolling B.E. / B. Tech. (Hons) and B.E. / B. Tech. Minor. For the offer of each professional elective at least two choices shall be offered.

8 REQUIREMENTS OF ATTENDANCE AND PROGRESS

- 8.1** A student who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester.

Ideally every student is expected to attend all classes of all the courses and secure 100% 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, he/she shall secure not less than 75% (after rounding off to the nearest integer) of overall attendance as calculated as per clause 6.3.

- 8.2** However, a student who secures overall attendance between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) / participation in sports events may be permitted to appear for the current semester examinations,

subject to the condition that the student shall submit the medical certificate / sports participation certificate attested by the Head of the Institution. The same shall be forwarded to the Controller of Examinations for record purposes.

- 8.3** Students who secure less than 65% overall attendance shall not be permitted to write the University examination at the end of the semester and not permitted to move to the next semester. They are required to repeat the incomplete semester in the next academic year, as per the norms prescribed.

9 Readmission

Candidates who do not qualify to appear for end semester examinations of any semester for want of attendance and/or progress and/or character and conduct have to register for and repeat that semester at the next available opportunity subject to the approval of Directorate of Technical Education, Tamil Nadu and Anna University Chennai.

The re-admitted candidates have to follow the curriculum and syllabus as existing at the time of re-admission. The re-admission committee will decide the courses that he/she has to undergo in the new curriculum considering the equivalent courses that he/she has gone through in the old curriculum, so as to bridge the curriculum in-force and the old curriculum. The courses recommended by the committee shall be taken under a faculty mentor and appear for the examination as specified by the college.

10. CLASS ADVISOR

To help students in planning their courses of study and for general advice on the academic programme, the Head of the Department will attach about 30 students to a faculty member of the Department who shall function as class advisor for those students.

Such class advisor shall advise the students and monitor the courses undergone by the students, check the attendance and progress of the students attached to him/her and counsel them periodically. If necessary, the class advisor may also discuss with or inform to the parents about the progress of the students through the Head of the Department concerned. Class advisor also help the chairperson of the class committee in planning and conduct of the class committee meetings.

Class Advisor acts as the channel of communication between the HOD and the students of the respective class and also collects and maintain various statistical details of students.

The class advisor also helps the chairperson of the class committee in planning and conduct of the class committee meetings and also monitors the academic performance of the students including attendance and to inform the class committee, also makes the attend/involve in the students welfare / development activities like awards, medals, scholarships and industrial visits.

11. CLASS COMMITTEE

- 11.1** Every class shall have a class committee consisting of student representatives, designated faculty members and a chairperson who is not teaching 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 class room and in the laboratories.
 - Clarifying the regulations of the degree programme and the details of rules there in particularly (clause 6 and 8).
 - Informing the student representatives, the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
 - Informing the student representatives, the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory/ drawing/ project work / seminar etc.) the breakup of marks for each experiment/Mini projects / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.
 - Analyzing the performance of the students of the class after each test and finding the ways and means to improve learning and performance.
 - Identifying the weak students, if any, and requesting the teachers concerned to provide additional help or guidance or coaching to such weak students.
- 11.2** The class committee for a class under a particular branch is normally constituted by the Head of the Department. However, if the students of different branches are mixed in a class(like the first semester which is generally common to all branches),the class committee is to be constituted by the Head of the Institution.
- 11.3** The class committee shall be constituted in the first week of every semester.
- 11.4** At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee, covering all the elective courses.

- 11.5** 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.
- 11.6** The Head of the Institution may participate in any class committee meeting of the Institution.
- 11.7** The chairperson is required to prepare the minutes of every meeting, submit the same to the Head of the Institution within two days of the meeting and arrange to circulate among the concerned students and faculties. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the Management by the Head of the Institution.
- 11.8** The first meeting of the class committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. The class committee chairperson shall display the cumulative attendance particulars of each student of the Notice Board at the end of every such meeting to enable the students to know their attendance details to satisfy the Clause 7 of the Regulation. During these meetings the student members can express their opinions and suggestions of the other students of the class to improve the effectiveness of the teaching-learning process.

12. COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one section or more than one discipline or group, shall have a "Course Committee" comprising all the teachers teaching the common course with one of them nominated as course coordinator/ module coordinator. The nomination of the course coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The 'Course Committee' shall meet regularly and ensure uniform evaluation of the tests and arrive at a common scheme of evaluation for the tests. Wherever it is feasible, the course committee may also prepare a common question paper for the internal assessment test(s).

13. SYSTEM OF EXAMINATION

- 13.1** Performance in each course of study shall be evaluated based on (i) continuous internal assessment throughout the semester and (ii) Semester Examination at the end of the semester.
- 13.2** Each course, both theory and practical (including project work & viva voce examinations) shall be evaluated for a maximum of 100 marks.

- 13.2.1** For all theory courses, the continuous internal assessment will carry **40 marks** while the End Semester examination will carry **60 marks**.
- 13.2.2** For all theory courses with laboratory component, the continuous internal assessment will carry **50 marks** while the End Semester examination with theory component will carry **50 marks**.
- 13.2.3** For all laboratory courses, the continuous internal assessment will carry **60 marks** while the End Semester examination will carry **40 marks**.
- 13.2.4** For all Project based courses, the continuous internal assessment will carry **50 marks** while the End Semester examination will carry **50 marks**.
- 13.2.5** The continuous internal assessment for the project work will carry **60 marks** while the End Semester examination will carry **40 marks**.
- 13.3** Internship / Industrial Training shall carry 100 marks and shall be evaluated through internal assessment only.
- 13.4** The End Semester Examination (theory and practical) of 3 hours duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.
- 13.5** The End Semester Examination for Project Work II shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding 4 students) by an external examiner and an internal examiner, followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner, the supervisor of the project group and an internal examiner.
- 13.6** For the End Semester Examination of practical courses including Project Work, the examiners shall be appointed by the Controller of Examinations.

Amendment
of
Clause
13.2.5

14 PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all theory, laboratory courses, theory courses with practical component and project work-phase I, the continuous assessment shall be awarded as follows:

SCHEME OF ASSESSMENT

All B.E./B.Tech programmes consist of Theory Courses, Laboratory Courses, Theory with Laboratory Component Courses, Project Based Courses appearance in the End Semester Examination is mandatory. All other Career Guidance Courses Project Work-I, Seminar,

Industrial/Practical Training, including Mandatory Courses are evaluated by continuous assessment only. Mandatory courses shall carry a maximum of 100 marks each and shall be evaluated through continuous assessment tests. However, the candidate(s) can earn each 3 credits for Universal Human Values, Startups and Entrepreneurship by successfully completing the courses.

14.1 THEORY COURSES

Two Continuous Assessment tests shall be conducted during the semester by the concerned department.

The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer (This also implies equal weightage to the two assessments). The scheme of assessment is represented in the table 1.

If a candidate has not appeared in any of the two tests for valid reason after getting prior permission from the class advisor / Head of the Department / Head of the Institution, he/she is eligible to write missed tests. An improvement test is conducted for the students those who are interested in improving the internal marks in the respective course(s).

14.2 Theory courses with Laboratory Component

Weightage of internal assessment and end semester examination marks will be 50% each. The distribution of marks for the theory and laboratory components in the internal assessments and end semester examination for different types of courses are provided in the table.

Table 7: Internal Assessments and End Semester Examination

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

The procedure for the conduct of internal assessments for theory and laboratory components shall be as per the clause 14.1 and 14.3 respectively.

*The weighted average shall be converted into 50 marks for internal Assessment.

Table 8: Scheme of Assessment

Category of Courses	Continuous Assessment (Including Model Exam)	Assignment/ Tutorial/ Practical Examination and Contest	Two Quizzes	Internal		End Sem
Theory	25 marks	10 marks	5 marks	40 marks		60 marks
Theory with Tutorial	25 marks	10 marks (Tutorial)	5 marks	40 marks		60 marks
Theory with Tutorial and Laboratory	17.5 marks (Theory)	5 marks (Tutorial)	2.5 marks	25 marks	50 marks	50 marks
	15 marks (Lab Assessment)	10 marks (Designathon/ Hackathon, etc)	-	25 marks		
Theory with Laboratory	20 marks (Theory)	2.5 marks	2.5 marks	25 marks	50 marks	50 marks
	15 marks (Lab Assessment)	10 marks (Designathon/ Hackathon, etc)	-	25 marks		
Project Based Courses	20 marks	-	-	50 marks		50 marks
	30 marks (Project)	-	-			
Laboratory	-	60 marks	-	60 marks	40 marks	
Procedure for Continuous Assessment of theory course						
Item						Marks
Periodical tests (2 Tests-2 hours each) (Each Test with 12.5 marks)				40 marks		60 marks
Procedure for Continuous Assessment of theory with laboratory courses						
Periodical tests (2 Tests from theory portion -2 hours each, 2 Lab Exam -2 hours each)				50 Marks		50 Marks

Table 9: Scheme of Assessment (Assignments/Tutorials)

Assignments/Tutorials		
Theory Courses	3 Assignments	3x50 Marks = 150Marks. This will be reduced to 10 Marks. Each assignment shall cover the requisite course outcomes, to check the understanding of the concepts and their applications.
Analytical Courses	No. of tutorials as per the time table	The average of marks obtained in all the tutorials shall be reduced to 5 marks.

14.3 Laboratory Courses

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. The criteria for arriving at the Internal Assessment marks of 60 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the model test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

Table 10: Laboratory Assessment

Internal Assessment (100 Marks) *	
Evaluation of Laboratory Observation, Record	Model Test
75	25

* Internal assessment marks shall be converted into 60 marks

14.4 Project Work / Internship

The student shall register for Project Work-I in pre-final semester and Project Work-II in final semester. There shall be three reviews during the semesters VII and VIII by the review committee. The student shall make presentation on the progress made by him / her before the committee. Students shall be permitted to take interdisciplinary and multidisciplinary projects. The total marks obtained in the three reviews shall be **reduced for 60 marks** and rounded to the nearest integer as per the scheme given below.

Amendment
of
Clause
14.4

The project report shall carry a maximum of 10 marks. The project report shall be submitted as per the approved guidelines. Same marks shall be awarded to every student within the project group for the project report. The viva-voce examination in phase- I shall carry 100marks. Marks are awarded to each student of the project group is based on the individual performance in the viva- voce examination.

- 14.4.1** The student shall register for Project Work in final semester. Project work may be allotted to a single student or to a group of students not exceeding 4 per group. The student is also permitted to undergo a semester long internship in an industry / academic / research institution

**Table 11: Project Work Phase – I
(Continuous Assessment Only)**

Review I (R1)			Review II (R2)		Review III (R3)			Total (R1+R2+R3)	Intern I
Literature Survey	Topic Identification & Justification	Work Plan	Approach	Conclusion	Demo-Existing System	Presentation	Report	Total	
10	10	10	20	20	10	10	10	100	100

- 14.4.2** Project Work shall be carried out under the supervision of a “qualified teacher” in the Department concerned. In this context “qualified teacher” means the faculty member possessing (i) PG degree or (ii) Ph.D. degree. The Project Work carried out in industry / academic/research institution shall be jointly supervised. The Project Work shall be jointly supervised by

a supervisor of the department and an expert from the organization as a joint supervisor and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and suitable record of the meetings shall be maintained.

- 14.4.3** The Head of the Institution shall constitute a review committee for Project Work for each programme. The review committee consists of supervisor, an expert from the Department and a project coordinator from the Department. If the project coordinator/expert member happens to be the supervisor, then an alternate member shall be nominated. In the case of Industrial Project / Internship, the review committee shall consist of the supervisor, the coordinator from industry and the project coordinator from the Department.

There shall be three reviews conducted by the review committee. The student shall make presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be reduced for 60 marks and rounded to the nearest integer (as per the scheme given in 12.4.4).

- 14.4.4** The project report shall carry a maximum of 10 marks. The project report shall be submitted as per the approved guidelines as given by the Director, Centre for Academic Courses. Same marks shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 30 marks. Marks awarded to each student of the project group is based on the individual performance in the viva-voce examination.

Table 12: Project Work Phase – II

Continuous Assessment (60 Marks)			End Semester Examinations (40 Marks)			
Review I	Review II	Review III	Project Report	Viva – Voce Examination		
20	20	20	External Examiner	Internal Examiner	External Examiner	Supervisor Examiner
			10	10	10	10

In the case of industrial projects, the marks allotted for supervisor will be shared equally by the supervisor from the Department and coordinator from Industry.

- 14.4.5** The last date for submission of the project report is on the last working day of the semester. If a student fails to submit the project report on or before the specified deadline, it will be considered as fail in the Project Work and the student shall re-register for the same in the subsequent semester.

14.4.6 Students shall also undertake a start-up activity for the development of products as part of project work. If the outcome of a start-up is a fully developed product and whose concept is tested and validated, then it shall be considered in lieu of the project work. Such students shall submit a startup report, which includes the concepts and process flow of the developed product, publications, and patents, if any.

Insertion
of
New
Clause
14.4.6

The evaluation of the start-up report is as per the clause 14.4.4.

14.5 Career Guidance Courses

Table 13: Evaluation Procedure for CGC & Mandatory Courses

Career Skill Development (CSD)
This will have Continuous Assessment (CA) and No End Semester (ES) Examination. This includes Aptitude, Verbal Reasoning, Logical Reasoning, Group Discussion, Oral and Written Communication Skills, Technical Paper Presentation, Resume Preparation, and Interview Skills.
Grade Ratings for Career Skill Development (CSD) are as follows: Very Good (VG) - 80 to 100; Good (G)-60 to 79; Fair (F)- 40 to 59; Reappearance (U)-Below 40.

14.5.1 Other Career Guidance Courses

- a. The Seminar / Case Study / Mini Project course is to be considered as purely INTERNAL (with 100% internal marks only). Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar, marks can be equally apportioned. The three-member committee appointed by the Head of the Institution, consisting of the course coordinator and two experts from the Department, will evaluate the seminar and at the end of the semester, the marks shall be consolidated and taken as one of the component in internal assessment.
- b. The Industrial/Practical Training, Summer Project, Internship, shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical Training / Internship / Summer Project, the student shall submit an attendance certificate from the organization where he / she has undergone training with a brief report. The evaluation will be made based on this report and a viva-voce Examination, conducted internally by a three members Departmental Committee constituted by the Head of the Institution consisting of the course coordinator and two experts from the Department. The certificates (issued by the organization) submitted by the students shall be attached to the mark list sent by the Head of the Department to the Controller of Examinations.
- c. Comprehensive Test to assess the overall knowledge of the

candidate in various courses he/she studied shall be evaluated with multiple choice questions generally with pattern similar to GATE

- d. For all the courses under Career Guidance Courses Category, except the Project Work, the evaluation shall be done with 100% internal marks and as per the procedure described in clause 14.5.1 (a) / (b) and one credit shall be offered as extra credit.

14.6 ASSESSMENT FOR VALUE ADDED COURSES AND OTHER COURSES

14.6.1 Value Added Courses

The one / two credit course shall carry 100 marks and shall be evaluated through **continuous assessments only**. Two Assessments as per pattern given below and it shall be conducted by the Department concerned. The total marks obtained in the assessments shall be reduced to 100 marks and rounded to the nearest integer. A committee consisting of the Head of the Department, staff handling the course and a senior faculty member nominated by the Head of the Institution shall do the evaluation process. The list of students along with the marks and the grades earned shall be forwarded to the Controller of Examinations for appropriate action at least one month before the commencement of End Semester Examinations. The grades earned by the students for Value Added Courses will be recorded in the Grade Sheet, however the same shall not be considered for the computation of CGPA.

Table 14: Value Added Courses/Certificate courses

ITEMS	Marks
Test1	50
Test II	50
Total Marks	100

Grades (Excellent (80 to 100) / Good (60 to 79) / Satisfactory (50 to 59))

14.6.2 One credit Courses

Students shall be allowed to take courses offered by Industry experts for 15-20 hrs of duration and the same shall be considered as one credit courses. On successful completion and passing the examination in 3 one credit courses, a maximum of one 3 credit professional elective / open course may be waived in 7th semester. Suitable courses shall be offered after due approval of committee consisting of Head of the Department, programme coordinator, module coordinators and course coordinators in consultation with the Head of the Institution. The students are also

permitted to study the one credit courses offered by other departments with the prior permission from the Head of the Institution.

**Table 15: One credit course
(Continuous Assessment only)**

ITEMS	Marks
Test1	50
Quiz/Assignment	50
Total Marks	100

**Table 16: Industrial Training/ Internship
(Continuous Assessment Only)**

ITEMS	Marks
Assessment by Industry	30
Viva-voce	20
Presentation	30
Case Study / Report	20
Total Marks	100

Table 17: Soft Skills Training (CA only)

ITEMS	Marks
Written test	50
Oral Communication	30
Technical Paper Presentation\Interview	20
Total Marks	100

14.7 System Based Examination and Open Book Examination

System Based Examination shall be conducted for programming related subjects for continuous assessment tests and the end semester examination. Computer aided examinations shall be conducted for analytical subjects on the lines of GATE examination for continuous assessment tests. Computer based Quiz shall be conducted for all courses.

Open book examination shall be conducted for continuous assessment tests for analytical courses as decided by BoS and approved by academic council and the committee consisting of HoD, Programme Coordinator and Module Coordinator.

14.8 Internal marks approved by the Head of the Institution shall be displayed by the respective HODs within 5 days from the last working day.

14.9 Attendance Record

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD', which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. 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 test marks and attendance. The Head of the Department will put his/her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Institution who will keep this document in safe custody (for five years). The University or any inspection team appointed by the University may verify the records of attendance and assessment of both current and previous semesters.

14.10 Conduct of Academic Audit

Every educational institution shall strive for a better performance of the students by conducting the internal assessments as mentioned in Clause 14.

In order to ensure the above, Academic Audit is to be done for every course taught during the semester. For the internal assessments conducted for each course as per details provided in Clause 14, the academic records shall be maintained in the form of documentation for the individual assignments / case study report / report of mini project submitted by each student and assessment test question paper and answer script. Report of industrial training / internship shall also be maintained. For laboratory courses students' record shall be maintained. Further, the attendance of all students shall be maintained as a record.

The Head of the Institution shall arrange to conduct the Academic Audit for every course in a semester by forming the respective committees with an external course expert as one of the members drawn from a technical institution of repute near the institute.

The University or any inspection team appointed by the University may verify the records of Academic Audit report of the courses of both current and previous semesters, as and when required.

15. REQUIREMENTS FOR APPEARING FOR END SEMESTER EXAMINATIONS

A student shall normally be permitted to appear for the End Semester Examinations for all the courses registered in the current semester (vide clause 7) if he/she has satisfied the semester completion requirements (as per clause 8).

Further, examination registration by a student is mandatory for all the courses in the current semester and all arrear(s) course(s) for the End Semester Examinations failing which, the student will not be permitted to move to the higher semester.

A student who has already appeared for any course in a semester and passed the examination is not entitled to reappear in the same subject for improvement of grades.

16. PASSING REQUIREMENTS

16.1 A student who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester Examinations] with a minimum of 45% of the marks prescribed for the end-semester Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and laboratory courses (including project work).

16.2 If a student fails to secure a pass in a theory course, Integrated Course / laboratory course (except electives), the student shall register and appear only for the end semester examination in the subsequent semester. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (IA + End Semester Examination) as per clause 16.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the End semester examinations alone and will be awarded the lowest grade C.

16.3 If the course, in which the student has failed, is a Professional Elective or an Open Elective course, the student may be permitted to complete the same course. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (IA + End Semester Examination) as per clause 16.1, then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the End Semester Examinations alone and will be awarded the lowest grade C.

If any other Professional Elective or Open Elective course is opted by the student, the previous registration is cancelled and henceforth it is to be considered as a new Professional Elective or Open Elective course. The student has to register and attend the classes, earn the continuous assessment marks, fulfil the attendance requirements as per clause 8 and appear for the end semester examination.

16.4 If a student submitted the project report and absent during the viva - voce examination, it would be considered as fail. In case, the student fails in the subsequent viva -voce examination also, the student shall register for the course again in the subsequent semester and can-do Project Work-I and Project Work-II together.

Amendment
of
Clause 16.4

16.5 The passing requirement for the courses which are assessed only through purely internal assessments (CG courses except Project Work and laboratory), is 50% of the internal assessment (continuous assessment) marks only.

16.6 A student can apply for revaluation of the student's semester examination answer paper in a theory course, as per the guidelines of the COE on payment of a prescribed fee along with prescribed application to the COE through the Head of the Institution. The COE will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institution. Revaluation is not permitted for laboratory course and CG courses.

17 AWARD OF LETTER GRADES

17.1 The award of letter grades will be decided using relative grading principle except Laboratory Courses and Project Work. The performance of a student will be reported using letter grades, each carrying certain points as detailed below:

Amendment
of
Clause 17.1

Table 18: Letter Grades

Letter Grade	Grade Points*
O (Out Standing)	10
A+ (Excellent)	9
A (Very Good)	8
B+ (Good)	7
B (Average)	6
C (Satisfactory)	5
U (Re-Appearance)	0
SA (Shortage of Attendance)	0
WD (Withdrawal)	0

A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: "O", "A+", "A", "B+", "B", "C".

'SA' denotes shortage of attendance (as per clause 8.3) and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet.

“U” denotes that the student has failed to pass in that course. “WD” denotes withdrawal from the exam for the particular course. The grades U and WD will figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the End Semester Examinations as per the Regulations.

If the grade U is given to Theory Courses/ Laboratory Courses it is not required to satisfy the attendance requirements (vide clause 8), but has to appear for the end semester examination and fulfil the norms specified in clause 16 to earn a pass in the respective courses.

If the grade U is given to EEC course (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, fulfil the norms as specified in clause 16 to earn pass in the course. However, attendance requirement need not be satisfied.

17.1.1 Relative Grading

For those students who have passed the course (theory course / laboratory integrated courses / theory integrated courses / all other CG except laboratory course / Project Work Courses), the relative grading shall be done. The marks of those students who have passed only shall be given as input 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. (Theory course / laboratory integrated courses / theory integrated courses and all other EEC Courses). If the students’ strength is greater than 30, the relative grading method shall be adopted.

Insertion
of
New
Clause
17.1.1

17.1.2 Absolute Grading

- In all the courses, if the number of students who have passed the course is less than or equal to 30 then absolute grading shall be followed with the grade range as specified in the Table.
- For the Project Work / Internship and Laboratory Courses, absolute grading procedure shall be followed as given in the Table below irrespective of the number of students who have passed the course.

Insertion
of
New
Clause
17.1.2

Table 19: Grade range for absolute grading

O	A+	A	B+	B	C	U
91 - 100	81 – 90	71 - 80	61 - 70	56 - 60	50 - 55	<50

17.2 For the Co-curricular activities such as National Cadet Corps (NCC)/ National Service Scheme (NSS) / NSO / YRC / Science club / Literary

Club/ Fine Arts Club, a 'completed' remark will appear in the Grade Sheet on successful completion of the same. Every student shall put in a minimum of 75% attendance in the training and attend the camp or events of the clubs compulsorily. The training and camp or club events shall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in the subsequent years.

Successful completion of any one of the above co-curricular activities is compulsory for the award of degree.

17.3 The grades O, A+, A, B+, B, C obtained for the one / two credit course (not the part of curriculum) shall figure in the Grade Sheet under the title 'Value Added Courses/Internship/Industrial training'. The courses for which the grades obtained are RA, SA will not figure in the Grade Sheet.

17.4 For the students who complete the Mandatory Course satisfying attendance requirement, the title of the Mandatory Course will be mentioned in the Grade Sheet.

Amendment
of
Clause 17.4

17.5 GRADE SHEET

Amendment
of
Clause 17.5

After results are declared, Grade Sheets will be issued to each student which will contain the following details:

- The college in which the student has studied
- List of courses studied for Hons., Minor and any other additional courses in which the student has passed with the grades under the title additional courses.
- The Grade Point Average (GPA) for the semester considering only the courses of curriculum (not the additional courses) and
- The Cumulative Grade Point Average (CGPA) of all courses registered from first semester onwards considering only the courses of curriculum (not the additional courses). However, for the students who have successfully completed the requirements of B.E. / B. Tech. (Hons) and B.E. / B.Tech. Minor vide Clause 4.14, grades scored in the six additional courses shall be taken into account for the computation of CGPA.
- During each semester, the list of curricular courses (not the additional courses) registered and the grades scored in each course are used to compute the Grade Point Average (GPA). GPA is the ratio of the sum of the products of the number of credits of curricular courses (not the additional courses) registered and the grade points corresponding to the grades scored in those courses, taken for all the courses, to the sum of the number of credits of all the courses in the semester. U grades will be excluded for calculating GPA and CGPA.

$$\text{GPA / CGPA} = \frac{\sum_{i=1}^n C_i \text{ GP}_i}{\sum_{i=1}^n C_i}$$

Where **C_i** is the number of Credits assigned to the course

GP_i is the point corresponding to the grade obtained for each Course

n is number of all courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

17.5.1 If a student study more number of professional and open electives than required as per the student's programme curriculum, the calculation of final CGPA shall be as per 4.14.6 and 4.14.7.

Insertion
of
New Clause
17.5.1

17.5.2 If a student successfully completes all the requirements of the programme and also meets the requirements of B.E. / B. Tech. (Hons) or B.E. / B. Tech. Minor but desires not to opt for the additional qualification, then he/she has to submit a declaration with regard to the same 30 days before the completion of VIII semester.

Insertion
of
New Clause
17.5.2

17.5.3 In the consolidated grade sheet, the CGPA earned shall be converted into percentage of marks as follows:
Percentage of Marks = CGPA × 10.

Insertion
of
New Clause
17.5.3

18 ELIGIBILITY FOR THE AWARD OF THE DEGREE

18.1 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.
- ii. Successfully completed the course requirements, appeared for the End Semester examinations and passed all the subjects within the period as prescribed in clause 6.1 and 6.1.1.
- iii. Successfully passed any additional courses whenever the student is readmitted with earlier Regulations.
- iv. Successfully completed the NCC / NSS / NSO / YRC / Science Club / Literature Club / Fine Arts Club requirements.
- v. No disciplinary action pending against the student.
- vi.** The award of Degree must have been approved by the Syndicate of the University.

18.2 CLASSIFICATION OF THE DEGREE AWARDED

18.2.1 FIRST CLASS WITH DISTINCTION

Amendment
of Clause
18.2.1

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

- Should have passed the examination in all the courses of all the eight semesters (6 semesters in the case of Lateral Entry) in the student's First Appearance within **five** years (Four years in the case of Lateral Entry). Withdrawal from examination (vide Clause 19) will not be considered as an appearance.
- Should have secured a CGPA of not less than **8.50**.
- One-year authorized break of study (if availed of) and four years in the case of lateral entry for award of First class with Distinction.
- Should NOT have been prevented from writing end semester examination in any of the courses of the Curriculum making up the total credit requirement.
- A student who satisfies norms given in clause 4.14 becomes eligible for classification of the degree with B.E./B.Tech. (Hons) and B.E./B.Tech. minor.

Table 20: Details of First Class with Distinction

Degree	Duration of programme	Duration permitted	Additional credits above the requirement of curriculum	CGPA	Pass in	Break of study	Prevention to write end semester examination	Withdrawal from writing end semester Examination
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	-	(viii)
B.E./ B.Tech. (Regular)	4 years	5 years	-	8.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. (Lateral)	3 years	4 years	-	8.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. (Hons.)	3/4 years (Lateral entry, Regular respectively)	4/5 years (Lateral entry, Regular respectively)	18 credits from more than one verticals of the same programme	8.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. Minor	3/4 years (Lateral entry, Regular respectively)	4/5 years (Lateral entry, Regular respectively)	18 credits from any one vertical of the other programme	8.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt

18.2.2 FIRST CLASS

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

- Should have passed the examination in all the courses of all eight semesters (6 semesters in the case of Lateral Entry) **within five years**. (Four years in the case of Lateral Entry).
- One-year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of five years (Four years in the case of lateral entry) for award of First class.
- Should have secured a CGPA of not less than **6.50**.
- A student who satisfies norms given in clause 4.14 becomes eligible for classification of the degree with B.E./B.Tech. (Honours) and B.E./B.Tech.minor.

Table 21: Details of First Class

Degree	Duration of programme	Duration permitted	Additional credits above the requirement of curriculum	CGPA	Pass in	Break of study	Prevention to write end semester examination	Withdrawal from writing end semester examination
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	-	(viii)
B.E./ B.Tech. (Regular)	4 years	5 years	-	6.50	-	One year authorised break of study included in the Duration permitted (iii)	included in the Duration permitted (iii)	-
B.E./ B.Tech. (Lateral)	3 years	4 years	-	6.50	-	One year authorised break of study included in the Duration permitted (iii)	included in the Duration permitted (iii)	-
B.E./ B.Tech. (Hons.)	3/4 years (Lateral entry, Regular respectively)	4/5 years (Lateral entry, Regular respectively)	18 credits from more than one verticals of the same programme	7.50	First attempt	One year authorised break of study included in the Duration permitted (iii)	Not permitted	Will not be considered as an attempt
B.E./ B.Tech. Minor	3/4 years (Lateral entry, Regular respectively)	4/5 years (Lateral entry, Regular respectively)	18 credits from any one vertical of the other programme	6.50	-	One year authorised break of study included in the Duration permitted (iii)	included in the Duration permitted (iii)	-

- 18.2.3** Students who pursue B.E./B.Tech. in Regular mode or lateral entry mode or B.E./B.Tech. minor in specialisation of another discipline and who are not covered in clauses 18.2.1 and 18.2.2 and who qualify for the award of the degree (vide Clause 18.1) shall be declared to have passed the examination in **Second Class**. Amendment of Clause 18.2.3
- 18.2.4** 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 17) for the purpose of classification.
- 18.2.5** Student earned additional 18 credits as per Clause 4.14 (i) and (ii) but does not satisfy the conditions mentioned in 18.2.1 or 18.2.2 shall not be awarded B.E./B.Tech.(Hons.) In such case if the student becomes eligible for First Class, while computing CGPA with the Professional Elective / Open Elective courses with higher grades the student shall be awarded B.E. / B.Tech. in First Class only. Insertion Of New Clause 18.2.4
- 18.3** A student who is absent in end semester examination in a course / project work after having registered for the same shall be considered to have appeared in that examination for the purpose of classification. (Subject to clause 19). Amendment Of New Clause 18.2.5
- 18.4 Photocopy / Revaluation**
- A student can apply for photocopy of his/her semester examination answer paper in a theory course, as per the guidelines of the COE, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Department. The answer script is to be valued and justified by a faculty member, who has handled the subject and recommend for revaluation with the breakup of marks for each question.
- Based on the recommendation, the student can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institutions. Revaluation is not permitted for practical courses and CG courses.
- 18.5 Review**
- Students not satisfied with Revaluation can apply for Review of his/ her examination answer paper in a theory course, within the prescribed date on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Department. Students applying for Revaluation only are eligible to apply for Review. Students shall forward the grievances related to assessment, examination and other curricular related issues to grievance redressal committee.

19 PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

19.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by the Chairman, Sports Board and the HOD) be granted permission to withdraw from appearing for the end semester examination in any course or courses in **ANY ONE** of the semester examinations during the entire duration of the degree programme. The application shall be sent to the COE through the Head of the Institution with required documents.

19.2 Withdrawal application is valid if the student is otherwise eligible to write the examination (Clause 8) and if it is made within TEN days after the date of the examination(s) in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations. For a student to withdraw from a course / course, he/she should have registered for the course, fulfilled the attendance requirements (vide Clause 8) and earned continuous assessment marks.

19.2.1 Notwithstanding the requirement of mandatory 10 days, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

19.3 In case of withdrawal from a course / course, the courses will figure both in the Grade Sheet as well as in the Result Sheet. However, withdrawal shall not be considered as an appearance for the eligibility of a student for First Class with Distinction.

19.4 If a student withdraws from writing end semester examinations for a course or courses, he/she shall register for the same in the subsequent semester and write the end semester examination(s).

19.5 If a student applies for withdrawal from Project Work, he/she will be permitted for the withdrawal only after the submission of project report before the deadline. However, the student may appear for the viva-voce examination within 60 days after the declaration of results for Project Work I and II respectively and the same shall not be considered as reappearance.

Amendment
Of Clause
19.5

19.6 Withdrawal is permitted for the end semester examinations in the final semester, as per Clause 18.2.1

20 PROVISION FOR AUTHORISED BREAK OF STUDY

20.1 A student is permitted to go on authorized break of study for a maximum period of one year as a single spell.

- 20.2** Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the student may apply for additional break of study not exceeding another one year. If a student intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to re-join the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Director, Student Affairs in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of re-joining the programme.
- 20.3** The student permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall register for additional courses, if any, under change of Regulations. These courses may be from any of the semesters of the curriculum in force, so as to bridge the curriculum in force and the old curriculum.
- 20.3.1** Total number of credits to be earned by the student shall be more than or equal to the total number of credits prescribed in the curriculum in force. If the credit assigned for L T P of the courses are not same in two Regulations under consideration, then equivalence shall be arrived as per the credit assignment followed in the Regulations in force.
- 20.4** The authorized break of study is included in the duration specified for passing all the courses for the purpose of classification (vide Clause 18.2).
- 20.5** The total period for completion of the Programme reckoned from, the commencement of the first semester to which the student was admitted shall not exceed the maximum period specified in clause 6.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 20.6** If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study' (Clause 20.1).
- 20.7** If a student in Full Time mode wants to take up a job / start-up / entrepreneurship during the period of study, he/she shall apply for authorized break of study for one year. The student shall join the job / start-up / entrepreneurship only after getting approval of the same by the Director, Centre for Academic Courses with due proof to that effect.
- 20.8** No fee is applicable to students during the Break of Study period.

Insertion
of new
clause
20.3.1

21 DISCIPLINE

21.1 Every student is required to observe disciplined and decorous behaviour both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the University / College. The Head of the Institution shall constitute a disciplinary committee consisting of the Head of the Institution, Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and notify the University about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted including one representative from Anna University, Chennai. In this regard, the member will be nominated by the University on getting information from the Head of the Institution.

21.2 If a student indulges in Malpractice in any of the End Semester Examination / internal examination he / she shall be liable for punitive action as prescribed by the University from time to time.

22. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The College may from time-to-time revise, amend or change the Regulations, scheme of examinations and syllabi if found necessary, through the approval of respective BoS and Academic Council of the College.

Annexure - I

Mapping of NPTEL Marks with Grades

I. The following procedure is followed to map the NPTEL marks with grades, if number of students passed in NPTEL examination is greater than 1.

1. The marks scored by each student in a course is registered (x_i)
2. The Total Number of students passed in the course (N)
3. Average / Mean is calculated

$$\text{Mean } (\mu) = \frac{\text{Total marks of all students}}{\text{No. of students } (N)}$$

$$4. \text{ The standard Deviation } (\sigma) = \sqrt{\frac{\sum_{i=1}^N (x_i - \mu)^2}{N - 1}}$$

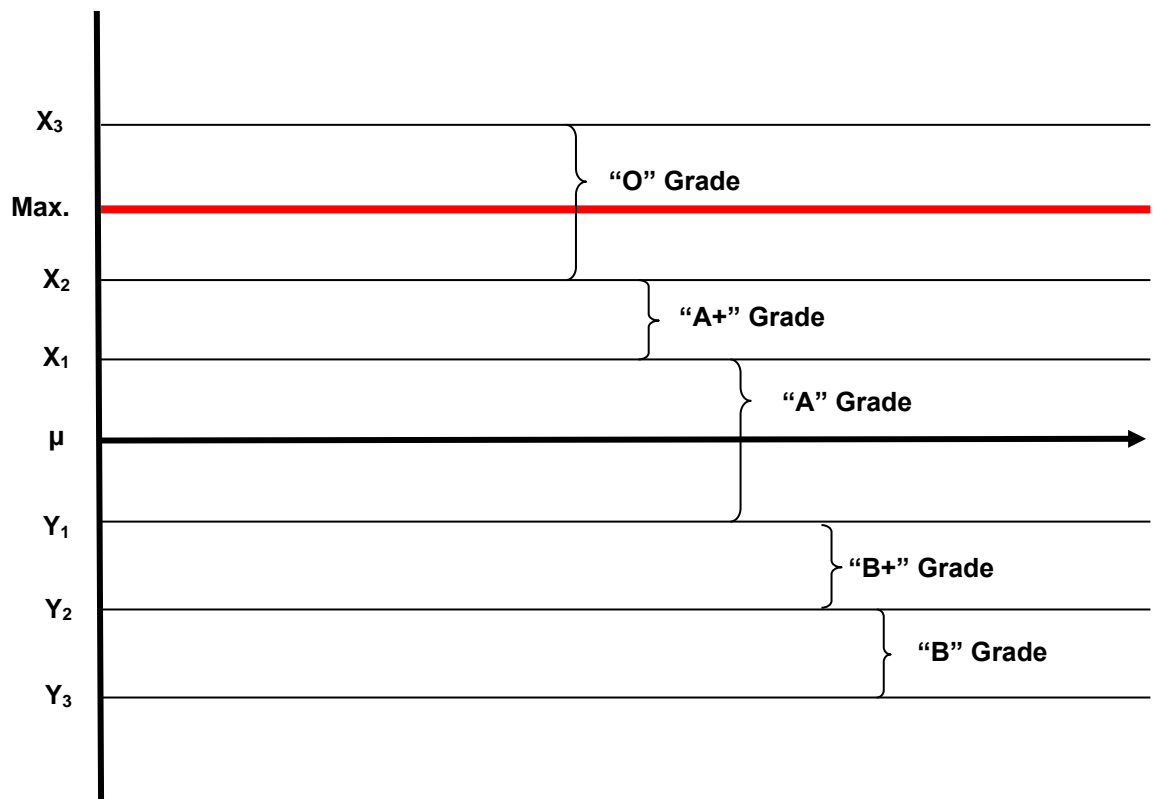
5. The grading intervals are calculated using the formula

$$x_i = \mu + i \frac{\sigma}{2}$$

$$y_i = \mu - i \frac{\sigma}{2}$$

Where $i = 1, 3, 5, \dots$

6. Based on the marks scored and the value of x_i , the ranges of marks for a particular grade is fixed.



Sample Calculation:**Subject Name:** Education for Sustainable Development

S. No.	Reg. No.	Name	NPTEL Mark	Mark - Mean	(Mark - Mean)^2	Grade
1	2303737710421014	GURU PRASATH L	55	-10	100	B+
2	2303737710421017	HARIPRASANTH B B	80	15	225	O
3	2303737710421034	NATARAJAN S	75	10	100	A+
4	2303737710422071	ABI MALAR R A	54	-11	121	B+
5	2303737710422079	DHARANIPRIYA M	75	10	100	A+
6	2303737710422082	GOPIKA SELVENTHIRAN	66	1	1	A
7	2303737710422113	SHARMI R V	55	-10	100	B+
8	2303737710422119	SWEATHA S	71	6	36	A+
9	2303737714821004	ALLWIN JEROME J	61	-4	16	A
10	2303737714821005	ARJUN SELVAKUMAR	67	2	4	A
11	2303737714821021	LOKESH VERMA P	72	7	49	A+
12	2303737714821022	MEGANATHAN	60	-5	25	A
13	2303737714821038	THARUNKUMAR R	54	-11	121	B+
14	2303737714821039	VIJAY E	53	-12	144	B+
15	2303737714822058	SUBHAHARINI R	75	10	100	A+

Total marks of all students =

973 $\Sigma (x_i - \mu)^2 =$ **1242** $\mu = (973 / 15)$ **65** $\Sigma (x_i - \mu)^2 / (N - 1)$

88.71

 $\sigma =$

9.42

$\mu + (\sigma / 2)$	69.58	$\mu - (\sigma / 2)$	60.16
$\mu + (3\sigma / 2)$	78.99	$\mu - (3\sigma / 2)$	50.73
$\mu + (5\sigma / 2)$	88.41	$\mu - (5\sigma / 2)$	41.32

Grade	O	A+	A	B+	B	C
NPTEL Mark	>78	69 - 77	60 - 68	50 - 59	41 - 49	40

II. The following procedure is followed to map the NPTEL marks with grades, if number of students passed in NPTEL examination is equal to 1.

Letter Grade	NPTEL Marks
O	90 – 100
A+	80 – 89
A	70 – 79
B+	60 – 69
B	50 – 59
C	40 - 49

Annexure - II



K.S.RANGASAMY COLLEGE OF TECHNOLOGY, TIRUCHENGODE- 637 215

(An Autonomous Institution, Affiliated to Anna University, Chennai)

1. Student Intern Performance Review / Employer Assessment of Intern Form

We appreciate your contribution to the professional growth and development of our students. In order for us to best assess the experience, we request you to complete this form and return it to us at the end of the internship period. We believe that your comments will help the student to build his career.

2. Student Information

Intern's Name		Department	
Semester		Type: Paid/Unpaid	
Period of Internship	From:	To:	

Please rate the intern in each area using the following criteria and score:

Not Applicable-0; Not acceptable-1; Needs improvement-2; Meets Requirements-3; Above Average-4 ; Exceptional-5.

1. Adherence to Work Schedule

Meets attendance and punctuality expectations; completes assigned tasks in time; keeps commitments and takes responsibility for own actions.

<input type="checkbox"/> Meets Requirements	<input type="checkbox"/> Needs improvement	<input type="checkbox"/> Above Average
<input type="checkbox"/> Exceptional	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Not acceptable

2. Team Player

Consistently demonstrates proactive nature takes independent action and calculated risks; knows when to seek prior approval.

<input type="checkbox"/> Meets Requirements	<input type="checkbox"/> Needs improvement	<input type="checkbox"/> Above Average
<input type="checkbox"/> Exceptional	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Not acceptable

3. Communication Skills

Exhibits good listening and comprehension; Interacts well with others and resolves conflicts.

<input type="checkbox"/> Meets Requirements	<input type="checkbox"/> Needs improvement	<input type="checkbox"/> Above Average
<input type="checkbox"/> Exceptional	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Not acceptable

4. Learning Curve

Competent in required job skills and knowledge; exhibits ability to learn and apply new skills; requires minimal supervision ability to apply creative solutions to problems.

<input type="checkbox"/> Meets Requirements	<input type="checkbox"/> Needs improvement	<input type="checkbox"/> Above Average
<input type="checkbox"/> Exceptional	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Not acceptable

5. Decision Making

Accepts criticism and constructive feedback applies skills appropriate for carrying tasks and solving problems; makes sound decisions.

- | | | |
|---|--|---|
| <input type="checkbox"/> Meets Requirements | <input type="checkbox"/> Needs improvement | <input type="checkbox"/> Above Average |
| <input type="checkbox"/> Exceptional | <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Not acceptable |

6. Responsibility and Reliability

Demonstrates accuracy and thoroughness; work reflects compliance to standards, commitment to excellence and attention to detail; strives to increase productivity.

- | | | |
|---|--|---|
| <input type="checkbox"/> Meets Requirements | <input type="checkbox"/> Needs improvement | <input type="checkbox"/> Above Average |
| <input type="checkbox"/> Exceptional | <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Not acceptable |

7. Employment Skills

Willingness to learn new skills which are job-specific or more general.

- | | | |
|---|--|---|
| <input type="checkbox"/> Meets Requirements | <input type="checkbox"/> Needs improvement | <input type="checkbox"/> Above Average |
| <input type="checkbox"/> Exceptional | <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Not acceptable |

8. Technical Competencies

Ability to apply learned skills to the internship work environment

- | | | |
|---|--|---|
| <input type="checkbox"/> Meets Requirements | <input type="checkbox"/> Needs improvement | <input type="checkbox"/> Above Average |
| <input type="checkbox"/> Exceptional | <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Not acceptable |

9. Critical Thinking and Problem Solving Skills

Demonstrates critical thinking and problem solving skills

- | | | |
|---|--|---|
| <input type="checkbox"/> Meets Requirements | <input type="checkbox"/> Needs improvement | <input type="checkbox"/> Above Average |
| <input type="checkbox"/> Exceptional | <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Not acceptable |

10. Ethics & Professionalism

Understand the ethical responsibility towards society and the principles of fairness while dealing with all stakeholders.

- | | | |
|---|--|---|
| <input type="checkbox"/> Meets Requirements | <input type="checkbox"/> Needs improvement | <input type="checkbox"/> Above Average |
| <input type="checkbox"/> Exceptional | <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Not acceptable |

OVERALL EVALUATION:

Total Marks:

50

Please give in written form of assessment of the student's performance.

Is the student better prepared for the industry? What is the possibility of being hired as a permanent employee in your concern?

What is your suggestion for improvement of the intern?

Employer Information:

Name and Signature of the Reviewer	
Designation & email	
Name of the Company	
Address	
Date of Evaluation	