

THIAGARAJAR COLLEGE OF ENGINEERING
(A Govt. Aided Autonomous Institution, Affiliated to Anna University)
MADURAI – 625 015, Tamil Nadu

S. No.	Resolution No	Introduction / Amendments	Applicable for students admitted from	Page No
1.	63:30	Introduce the Regulation for B.E./B.Tech. degree programme	2022-2023 onwards	1 - 23
2.	64:32	Introduce the Amendment in UG Regulations for the course on ‘Research Practice’	2021-2022 onwards	24
3.	64:33	Introduce the Honors in the same discipline, minor in other specialization and honors in other specialization for undergraduate degree programme	2021-2022 onwards	25 & 26
4.	69:41	Amendment the Lateral Entry Credit Distribution in the regulation of B.E./B.Tech. degree programme	Lateral Entry Students 2022-2023 onwards	27
5.	69:42	Amendment the shortage of attendance in all the registered courses of the current semester	2025-2026 onwards	28 & 29

THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 625 015
(A Govt. Aided Autonomous Institution affiliated to Anna University)

RULES AND REGULATIONS

B.E. /B.Tech. Degree Programmes (Full Time)
(CHOICE BASED CREDIT SYSTEM)

These rules and regulations are applicable to the students admitted from the academic year 2022-23 onwards

1.0 PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these regulations, unless the context otherwise requires:

- a. **“Degree”** means that academic award conferred upon a student on successful completion of a programme designed to achieve the defined attributes. It is referred to as Under-Graduate (UG) Degree, that is B.E./ B.Tech. Degree.
- b. **“Programme”** means cohesive arrangement of courses, co-curricular and extracurricular activities to accomplish predetermined objectives leading to the awarding of a degree. It also means specialization or discipline of B.E. / B.Tech. Degree programme like Civil Engineering, Information Technology, etc.
- c. **“Course”** means a theory, practical or Theory-cum-Practical subject studied in a semester, like Mathematics, Physics, etc.
- d. **“University”** means ANNA UNIVERSITY.

2.0 QUALIFICATIONS FOR ADMISSION

2.1 Regular Admission

The students seeking admission to the Bachelor of Engineering and Bachelor of Technology programme shall require satisfying eligibility rules as prescribed by the affiliating University and Directorate of Technical Education, Chennai, from time to time.

2.2 Lateral Entry Admission

The students who possess the Diploma in Engineering / Technology awarded by the State Board of Technical Education, Tamil Nadu or its equivalent are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. in the programme corresponding to the branch of study.

3.0 PROGRAMMES OF STUDY

B.E. Degree

Programme – I	: Civil Engineering
Programme – II	: Mechanical Engineering
Programme – III	: Electrical and Electronics Engineering
Programme – IV	: Electronics and Communication Engineering
Programme – V	: Computer Science and Engineering
Programme – VI	: Mechatronics

B.Tech. Degree

Programme – I	: Information Technology
Programme –II	: Computer Science and Business Systems

4.0 STRUCTURE OF PROGRAMMES

4.1 Categorization of Courses

Each programme shall have a curriculum comprising of Theory, Theory-cum-Practical and Practical courses with well defined Program Outcomes (PO), Programme Specific Outcome (PSO) and Programme Educational Objectives (PEO) as per Outcome Based Education (OBE) and Conceive-Design-Implement-Operate (CDIO) framework. The content of each course is designed based on the Course Outcomes(CO). The courses of a programme are categorized as follows:

A. Foundation Courses

- a. Humanities and Social Science including Management (HSSM)
- b. Basic Science(BS)
- c. Engineering Science (ES)

B. **Professional Core Courses** relevant to the chosen programme of study.

C. Professional Elective Courses

- a. Programme Specific Elective
- b. Programme Specific Elective for Expanded Scope

D. Open Elective Courses

- a. Interdisciplinary Elective
- b. Science and Humanities Elective

E. **Project, Seminar, Internship in Industry or at Higher learning institutions.**

F. **Mandatory Courses prescribed by AICTE / UGC**

The recommended distribution of credits for each category is given Table 1.

Table1: Credit Distribution

S.No	Category	Credits (Regular)	Credits (Lateral)
A.	Foundation Courses	54-66	27-48
	Humanities and Social Sciences including Management (HSSM)	9-12	6-9
	Basic Science (BS)	24 -27	9-12
	Engineering Science (ES)	21-27	12-21
B.	Professional Core Courses	55	45
C.	Professional Elective Courses	24 – 39	24 – 39
	Programme specific Elective	15 – 24	15 – 24
	Programme Elective for Expanded Scope	9 -15	9 -15
D.	Open Elective Courses	6-12	6-12
	Interdisciplinary Elective	3-6	3-6
	Science and Humanities Elective	3-6	3-6
E.	Project, Seminar, Internship in industry or at Higher Learning institutions	12	12
F.	Mandatory Courses prescribed by AICTE/UGC (Not to be included for CGPA)	-	-
	Minimum Credits to be earned for the award of the Degree	160 (from A to E) and the successful completion of Mandatory Courses	120 (from A to E) and the successful completion of Mandatory Courses

4.2.1 Personality and Character Development:

All students shall register, on admission, in any one of the personality and character development programmes (NCC/NSS) and undergo training and attends camps as prescribed by the respective officers / coordinators. The training shall include classes on hygiene and health awareness and also training in first aid.

- **National Cadet Corps (NCC)** will have a number of parades/camps specified by the NCC officer.
- **National Service Scheme (NSS)** will have social service activities in and around the college specified by the NSS coordinator
- **Sports, games, drills and physical exercises** specified by the Physical Director

While the training activities will normally be during weekends, the camp will normally be during vacation period. Every student shall put in a minimum attendance in the training and attend the camp. The training and camps shall be completed during the first year of the programme. However, for valid reasons, the Principal may permit a student to complete this requirement in the second year.

- 4.3** In assigning the credits for the courses, 1 hour lecture/week, 1 hour tutorial/week, 2 hours practical/week, 2 hours project work or seminar/week is equivalent to 1 credit.
- 4.4** The curriculum of each semester shall normally be a blend of Theory courses, Theory-Cum-Practical and practical courses.

4.5 Internship

Each student has to undergo internship in an industry or at the institution. Two weeks of internship at industry/institution is equivalent to 1 credit. The internship report will be evaluated by a team of faculty members nominated by the Head of the Department for awarding the grade. Based on the recommendation by the team, the student will be awarded grade and credit and the results will be sent to The Controller of Examinations to indicate in the Mark Sheet. Each student has to earn 3 credits (6 Weeks) through internship in order to be eligible for the award of the Degree. However it will not be considered for CGPA calculations.

In addition to the minimum requirement, of 3 credits, if a student earns 3 more credits (6 Weeks of internship in one organization), the student may drop one Programme Elective course. However, if the number of credits earned is 1 or 2, these credits shall not be considered for exemption from Programme Elective Category.

4.6 Industrial Visit

Every student is expected to undergo one industrial visit every year starting from second semester of the programme, subject to the approval of the Head of the Department and Principal.

4.7 Industry supported Courses:

- 4.7.1** Students can opt for one-credit courses and two credit courses, offered by experts from industry/ research organizations and approved by academic council. Students can register such courses from his/her third year of study as and when these courses are conducted by different departments. A student is also permitted to register for these courses of other departments, provided the student has fulfilled the necessary pre-requisites of the course being offered and subject to the approval of both the heads of departments. There is no limit to the number of one-credit or two credit courses a student can register during the programme of study. However, a student can register for only one course in a semester. These courses are evaluated by the respective course coordinator of the programme. The maximum number of credits that can be earned from industry supported courses is limited to 4.

4.7.2 If a student does not successfully complete the registered industry supported one-credit or two credit courses in a semester, the registration of that course will be considered as cancelled. Further, it will not be treated as arrear and no supplementary examination will be conducted; alternatively, if he/she wishes, he/she can re-register for the same course in the ensuing semesters and successfully complete it as and when it is offered subsequently.

4.8 Guided Study Course

A student, who does not have history of arrear in the programme and CGPA greater than 8.0, can study ONE course under Programme Specific Elective or Programme Specific Elective for Expanded Scope in Elective category after his/her Second year of study, as a guided study course. One faculty member approved by the Head of the Department shall be responsible for the periodic monitoring and evaluation of the course. The student does not need to attend the classes. However, the student has to appear for continuous assessment tests and submit assignments to the respective faculty-in-charge assigned by the Head of the Department.

4.9 Interdisciplinary Elective

Interdisciplinary electives are courses offered by different departments. These courses do not have any prerequisites and could be chosen as electives by students of any programme. Students should opt for the courses offered from other departments only.

4.10 Science and Humanities Elective

Science and Humanities electives are advanced courses offered by Mathematics, Physics and Chemistry departments. These courses do not have any prerequisites and could be chosen in the even semester of academic year, as electives by students of any programme.

4.11 Online Courses

Students may be permitted to register for online courses offered by NPTEL and our institution (which are provided with certificate after evaluation of the performance through proctored examination), from his/her second semester of study as and when these courses are offered subject to the approval of the respective head of the department. On successful completion of the NPTEL course, he/she has to submit the copy of the certificate to the Head of the Department for exemption from registering for an elective course. Based on the recommendation by the team of

faculty members nominated by the Head of the Department, the student will be awarded grade and credits in Programme Specific Elective or Programme Specific Elective for Expanded Scope sub-categories.

For the online courses offered by the institution, terminal examination shall be conducted by the Controller of Examinations as proctored online examination. On successful completion of the online courses offered by the institution, the student will be awarded grade and credits in Programme Specific Elective or Programme Specific Elective for Expanded Scope sub-categories. If a student does not successfully complete the registered online course offered by the institution or not have taken the online proctored examination, the registration of that course will be considered as cancelled. Further, it will not be treated as arrear and no supplementary examination will be conducted; alternatively, if he/she wishes, he/she can re-register for the same course and successfully complete it as and when it is offered subsequently.

The following credits shall be awarded based on the duration of the online courses offered by NPTEL/ our institution: Every 4 weeks is equivalent to 1 credit. The maximum number of credits that can be earned from the online courses offered by the institution is limited to 3 and through NPTEL is also limited to 3.

4.12 Research Practice

A student with minimum CGPA of 8.00 without history of arrear can register for the course on 'Research Practice'. The outcome of the course will be a publication in SCI/ SCI-expanded/ SCOPUS indexed Journal/ conference in Science and Technology. Number of Credits for this course is 3. A group of maximum two (2) students can register for this course at the beginning of the fifth semester of the programme and they are the first two authors. The student shall work under a faculty advisor who has published at least 3 papers in SCI/ SCI-expanded/ SCOPUS indexed journals. The faculty advisor is a third and corresponding author. The credits can be earned by the student in subsequent semesters (Sixth and Seventh). When the student provides evidence of the publication of the research paper, through faculty advisor and Head of the Department, grade and credits will be awarded in the following semester. The grades will be awarded as per the details in Table 1.

S.No	Category of Journal	Grade
1	One Research Paper in SCI/SCI-Expanded Journal	S

2	Two Research Papers in SCOPUS indexed Journals	S
3	One Research Paper in SCOPUS indexed Journal	A
4	One Research Paper in SCOPUS indexed Conference	B

If the student is not able to publish within seventh semester, the registration will be automatically cancelled and he/she has to meet the credit requirements for the elective category by registering necessary elective course in eighth semester, if required. Further, if a student has not registered for this research course in fifth semester but meets all the requirements for earning the credits in this course, the student will be allowed to replace his/her grade and credits earned from programme specific elective or programme specific elective for expanded scope with grade and credits earned from this research course.

4.13 The medium of instruction, examinations and project report shall be in English.

5.0 DURATION OF THE PROGRAMMES

5.1 The duration for the B.E. / B.Tech. degree programmes shall extend over a period of 4 years (8 semesters) for the students admitted in the first semester but in any case not more than 8 years (16 semesters) and 3 years (6 semesters) for the students admitted in third semester (Lateral Entry students) and not more than 7 years (14) semesters.

5.2 Each semester normally consists of 90 working days, including Test and Examination Days. In any contingent situation, the number of working days per semester shall not be less than 65 days. The Principal is given the discretionary powers to decide the number of working days. In such contingencies, the Principal shall ensure that every faculty member teaches the full content of the specified syllabus for the course being taught.

5.3 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 5.1 irrespective of the period of Break of Study or prevention in order that the student may be eligible for the award of the degree.

- 5.4** For the purpose of regulations, the academic year will be divided into two Semesters, the odd semester normally spanning from June to November and the even semester from December to May.

6.0 COURSE REGISTRATION

- 6.1** Each student on regular admission shall register for all the courses prescribed in the curriculum in the student's first year of study.
- 6.2** A student has to earn the minimum number of total credits (160 Credits for Regular admission students and 120 Credits for Lateral Entry admission students), specified in the curriculum of the chosen programme of study in order to be eligible to obtain the degree. However, a student can earn more than the number of credits, if he/she wishes. In such case, the highest grades in the relevant category would be considered for CGPA calculation.
- 6.3** From II semester onwards, a student has the option of registering for additional courses or dropping existing courses in the 'Scheduling of Courses' of the programme. Total number of credits of such courses cannot exceed 6. However, the maximum number of credits the student can register in a particular semester cannot exceed 26, **excluding** the courses for which the student has done reappearance registration. The credits for industry supported courses and online courses are also included in calculating the number of credits per semester.
- 6.4** The registration for the courses, from second semester, will commence three days after the declaration of the examination results of preceding semester. The student shall register for the courses with the guidance of the student's Tutor/Faculty Mentor. If the student wishes, the student may drop courses (vide clause 6.3) within five working days after the commencement of the concerned semester and complete the registration process.
- 6.5** No course shall be offered by a Department unless a minimum of 25 students register for that course.
- 6.6** After registering for a course, a student shall attend the classes, satisfy the attendance requirements (vide clause 7.1 and 7.2.1), earn Continuous Assessment marks and appear for the End Semester Examinations, except for the arrear courses.

6.7. Reappearance Registration

- 6.7.1** If a student fails in a theory or a Theory-cum-Practical course, the student shall do reappearance registration for that course in the subsequent semester by retaining the Continuous Assessment Marks already earned.
- 6.7.2** If the theory or Theory-cum-Practical course, in which the student has failed, is an elective, the student may register for the same or any other elective in the subsequent semesters.
- 6.7.3** The student who does not obtain bonafide certificate in any practical course/ project shall register for the same in the subsequent semester, when offered next, and repeat the course. In this case, the student shall attend the classes, satisfy the attendance requirements (vide clause 7), earn Continuous Assessment marks and appear for the End Semester Examinations. However, if a student does not appear for terminal examination after completing all the requirements of the practical course and obtaining the bonafide certificate, the student shall do reappearance registration for that course in the subsequent semester and attend end semester examination without repeating the course.
- 6.7.4** If a student is not eligible to appear for end semester examination of a course due to lack of attendance, the student has to register for that course again, when offered next, attend the classes and fulfill the attendance requirements as per clause 7. If the course, in which the student has lack of attendance, is an elective, the student may register for the same or any other elective in the subsequent semesters.
- 6.7.5** A student who has already appeared for a course in a semester and passed the examination is not entitled to reappear the same course for improvement of Grade/Marks

7.0 REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION

7.1 COURSES IN THE FIRST SEMESTER

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

- a. He/she has earned not less than 75% of attendance in each course in first semester and not less than 75% of attendance on an average in all the courses in that semester put together, and
- b. His / her progress has been satisfactory and obtained bonafide certificate in the Record of all the Practical courses in the semester, and
- c. His / her conduct has been satisfactory.

7.1.1 Students who have earned less than 65% attendance in any individual course of the semester are not deemed to have completed the first semester. Students who have earned less than 75% **overall attendance** of that semester are not deemed to have completed the first semester.

7.1.2 A student who could secure at least 65% attendance (without considering any leave) in each course and overall attendance between 65% and 75% (without considering any leave) in the first semester shall be given exemption if he/she could secure more than 75% overall attendance by considering medical leave (hospitalization/accident/specific illness) and On Duty Leave (ODL) for participation in the College / University / State / National / International level Sports events (Vide clause 7.1.3) with prior approval from the Principal /competent authority. Such student shall apply for condonation to the Principal through the respective Head of the Department. After the approval from the principal, the student shall be permitted to appear for the current semester examinations by paying the prescribed fee. However, the students who have represented the college in NCC/NSS/Sports at University/State/National/International level are exempted from the condonation fee.

7.1.3 The students who are consistently good in academics ONLY be considered for the grant of ODL under co-curricular / extra-curricular activities by the competent authorities. The following activities shall be considered for the award of ODL:

- Sports and Games: TIES, Inter collegiate, Inter Zonal, Inter University, State level, National level and Open Tournaments.
- NCC: Camps and expeditions, NSS camps
- Cultural Programs at State, National and International level
- Seminar / Symposia: Paper presentation / Quiz
- Leadership course organized by other organizations & Alumni Association activities, Association Activities, Placement Activities
- Training Programs/internship at Industries and Higher Learning Institutions
- Personal damages incurred during the extra-curricular activities.

- The ODL requisition letter shall be forwarded to the Principal through the Head of the Department of the student by the staff-in-charge of the respective activities before completion of every activity.
- The ODL sanctioned letters shall be submitted to the Department office. The faculty-in-charge of the department office will check the eligibility for the award of attendance at the end of semester and the same may be submitted to the Head of the Department for approval.

7.1.4 Those students who are not deemed to have completed the semester with reference to the conditions specified above shall undergo the semester again in all the courses in the respective semester during next academic year.

7.2 Requirements for appearing for End Semester Examination for a Course from Second Semester

7.2.1 A student who has fulfilled the following conditions shall be deemed to be eligible to appear for the end semester examination, (except for the first semester of study on regular admission)

- Ideally, every student is expected to attend all the classes and earn 100% attendance. Students who have earned not less than 75% attendance coursewise taking into account the number of periods required for that course as specified in the curriculum.
- Students who have earned attendance less than 75% in a course will not be permitted to appear for End Semester Examination for that course. The student has to register and repeat that particular course in a subsequent semester when it is offered next. However, exemption may be given for the students who earned attendance between 65% and less than 75% in a particular course from the prescribed attendance requirement based on medical leave (hospitalization / accident / specific illness) and On Duty leave for participation in the College / University / State / National / International level Sports events (Vide clause 7.1.3) with prior approval from the Principal / competent authority. Such student shall be permitted to apply for condonation to the Principal through the respective Head of the Department. After the approval from the principal, the student shall be permitted to appear for the end semester examination for that course by paying the prescribed fee to the Controller of Examinations of the college. However, the students who have represented the college in NCC/NSS/Sports are exempted from the condonation fee.

- His / her progress has been satisfactory and obtained bonafide certificate in the Observation cum Record of all the Practical courses in the semester, and
- His / her conduct has been satisfactory.

7.2.2 Student who is permitted by the respective Head of the Department to carry out final semester project at industries/ organizations/higher learning institutions should submit the attendance certificate from the competent authority at every project review meetings and at the time of project report submission.

7.3 A student shall be permitted to appear for the terminal examinations only if,

- a. he/she satisfies the attendance requirements
- b. the student's conduct has been satisfactory
- c. he/she has paid the prescribed examination fees and registered for the examinations for all the courses of that semester within the due date specified by the Office of the Controller of Examinations. In second semester, the student should register all the courses of current semester and all the arrear courses in the first semester. If any student fails to register and pay the examination fees within the due date, he /she shall not be permitted to attend the end semester examinations. However, he/she will be permitted to continue their studies in the next higher semester, provided that the student should satisfy the requirements as stipulated in this clause of this regulations and to write the current semester courses and arrear courses if any, in the next supplementary examination as arrear courses on registration and payment of fees. It will be counted as an attempt for the student.

8.0 FACULTY MENTOR

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department will attach a certain number of students (Maximum 25) to a faculty member of the Department. He /she shall function as Faculty Mentor for these students throughout their period of study. The faculty mentor shall

- Advise the students in registering and reappearances registering of courses
- Monitor their attendance, academic progress and discipline of the students
- Counsel periodically or during the Faculty Mentor meeting scheduled in the class timetable.
- Inform the students about the various facilities and activities available to enhance the student's curricular and co-curricular activities.

- If necessary, the faculty member may also discuss with or inform the parents about the progress of the students through Head of the Department or in Parent – Teacher meeting.

9.0 ACADEMIC COMMITTEES

9.1 CLASS COMMITTEE

The objective of the Class Committee is to improve the teaching-learning process. The functions of the class committee include:

- Resolving difficulties experienced by students in the classroom and in the laboratories.
- Clarifying the regulations of the degree programme and the details of rules therein.
- Discussing the progress of academic schedule and deviations if any.
- Evaluating the performance of the students of the class after each test and finding the ways and means of improvement.
- Every class in first year of study shall have a class committee consisting of faculty members who are teaching in that class, student representatives (cross section of students from boys and girls) and a chairperson who is a faculty not handling the course for the class.
- From III semester onwards, Class committee comprises of all the faculty members who are handling courses in that particular semester and two student representatives from each course. A chairperson who is a faculty not handling course for that particular semester, nominated by the Head of the Department shall coordinate the activities of this committee.
- The class committee shall be constituted by the Head of the Department/Chief Tutor on the first week of commencement of the semester.
- The class committee shall meet three times in a semester as specified in the academic calendar.
- The Principal may participate in any class committee of the institution.
- During these meetings, the representative of the class shall meaningfully interact and express the opinions and suggestions of the other students of the class to improve the effectiveness of the teaching-learning process.
- The Chairperson is required to prepare the minutes of the meeting, signed by the members and submit the same to Head of the Department within five working days of the meeting. Head of the Department will in turn consolidate and forward the same to the Principal, within 10 working days of the meeting.

- In each meeting, the action taken report of the previous meeting is to be presented by the Chairperson of the class committee.

9.2 PERFORMANCE ASSESSMENT COMMITTEE

- The Performance Assessment Committee comprises of the Course Coordinators / Course faculty members and Programme Coordinator, nominated by the Head of Department. This committee shall meet to assess the attainment of Course Outcomes and Program Outcomes, progress and status of the students of the semester concerned at the beginning and end of the semesters. The committee can invite Faculty mentors and students as invitees.

10.0 SYSTEM OF EXAMINATION

10.1 Performance in each course of study shall be evaluated for a maximum of 100 marks based on one of the following:

- Continuous assessment throughout the semester and a terminal examination at the end of the semester. The continuous assessment will carry 50 marks while the terminal examination will carry 50 marks.
- Continuous Assessment only.

10.2 The terminal examination (Theory, Theory-cum-Practical & Practical) of 3 hours duration shall be conducted by the Controller of Examinations between October and December during the Odd Semesters and between March and May during the Even semesters. For Theory-cum-Practical courses, terminal examination will be conducted as either theory or practical examination as specified in the curriculum. All Practical examinations shall be conducted and evaluated at the Department itself on behalf of the Controller of Examinations.

10.3 For all the practical courses, students shall obtain bonafide certificate for the Observation cum Record completed from the Faculty in-charges / Head of the Department on or before the day of the practical examination. Students who have not obtained the bonafide certificate are not permitted to appear for the terminal examination.

10.4 For the project works, students shall obtain bonafide certificate for the project work completed from the project Guide and Head of the Department, at the end of the semester. Students who have not obtained the bonafide certificate are not permitted to appear for the terminal examination. Students who are not able to complete the

project work at the end of the semester can apply for extension to the Head of the Department, with the recommendation from the project guide for the period of 30 Days. If the project report is not submitted even beyond the extended time, then the student(s) is not eligible to appear for Project Viva Voce examination. Further, if a student fails to secure a pass in project work or not eligible to appear for Viva Voce Examination, the student shall register and repeat the project work again in the subsequent semesters.

- 10.5** The terminal examination for project work shall comprise of evaluation of the final report submitted by the project group (of not exceeding 4 students) by an external examiner. The project report shall carry 20 marks while the viva-voce examination shall carry 80 marks. Further, the performance of each student of the project group would be evaluated in a viva-voce examination conducted by a committee consisting of an external examiner appointed by the Head of the Department/the Controller of Examination, Head of the Department or faculty nominated by Head of the Department as Internal Examiner and Guide of the project group.
- 10.6** Students are prohibited from entering into the Examination Hall / Laboratories with any book or portion of book, manuscript, or paper of any description or Communicating with or copying from each other or communicating with anyone outside the Examination Hall / Laboratories. Programmable calculator, mobile phone shall not be permitted inside the Examination hall / Laboratories. However, any required codebooks and data sheets / books as specified in the question paper will be supplied inside the Examination hall / laboratories by the office of the Controller of Examinations. The students are warned that any form of Malpractice will be dealt with severely. The punishment may be canceling all the examinations registered by the student in that semester and debarring permanently from all the examinations and disciplinary action will be taken by the college authorities after conducting enquiry.
- 10.7** Identity card/Hall ticket of the college must be produced at the time of terminal examination. Any student fails to produce Identity card / Hall ticket shall be levied a spot fine by the Chief superintendent/ Examiners.
- 10.8** A student can apply for reassessment of his/her semester examination answer paper in theory and Theory-cum-Practical courses (treated as theory examination in the end semester examination), within three working days from the declaration of results, on

payment of a prescribed fee, as specified by the Controller of Examinations from time to time. The Controller of Examination will arrange for going through the answer scripts by the students and to make appeals. The reassessment results will be published before the commencement of supplementary examinations. Reassessment is not permitted for practical courses, project work and industry supported courses.

11.0 PROCEDURE FOR AWARDING MARKS FOR CONTINUOUS ASSESSMENT

11.1 Theory courses

- a. The award of marks for continuous assessment shall be normally based on three tests and three Assignments/tutorials/seminars/mini projects. The apportioning of marks shall be as follows:
 - i) 40 marks for tests
 - ii) 10 marks for assignments/tutorials/seminars/mini projects

However, the assessment pattern for awarding the continuous assessment marks may be designed by the course designers based on the nature of the course and is to be approved by the Academic Council.

- b. The first and second Continuous Assessment Tests will be normally conducted at the mid and end of the semester respectively. Subsequently, the third Continuous Assessment Test will be conducted as improvement/re-test covering full syllabus. Each test carries maximum of 50 marks. Among the three tests, the best two test marks will be considered for the award of maximum of 40 marks in test component of theory courses and 20 marks in theory component of Theory-cum-Practical course.
- c. There will be three assignments for each course which will be considered for awarding marks for assignment.
- d. Both test and assignment marks put together is 50 marks maximum and rounded to nearest integer if necessary.
- e. A student who is absent or has failed in the end semester examinations in any theory course is permitted to appear for supplementary examination by retaining the Continuous Assessment already earned in the next two attempts of his/her choice. For further attempts, only the marks earned in the supplementary examination will be considered for passing the course as prescribed in the Scheme of Examinations (Minimum Marks for Pass).

11.2 Practical courses

The continuous assessment mark will be awarded as follows:

Description	Marks
Observation-cum-Record in regular class works	30
Test (before last lecture day)	20
Total Marks	50

However, the assessment pattern for awarding the continuous assessment marks may be designed by the course designers based on the nature of the course and is to be approved by the Academic Council. If a student has not obtained bonafide certificate (vide clause 12.1) in a Practical course, the continuous assessment marks the student has earned is no longer valid. He/she shall register for the same in the subsequent semester, when offered next, and repeat the laboratory course again.

11.3 Theory-cum-Practical Courses:

The first and second Continuous Assessment Tests will be normally conducted at the mid and end of the semester respectively. Subsequently, the third Continuous Assessment Test will be conducted as improvement/re-test covering full syllabus. Each test carries maximum of 50 marks. Among the three tests, the best two test marks will be considered for the award of maximum of 20 marks in theory component of the course. A test will be conducted for 20 marks in practical component. Average mark awarded for viva – voce, conduct of experiments, observation & results, record work in regular class works shall be reduced to 10 marks. The sum of these 50 Marks would be rounded to the nearest integer. However, the assessment pattern for awarding the continuous assessment marks may be designed by the course designers based on the nature of the course and is to be approved by the Academic Council.

A student who is absent or has failed in the end semester examinations in any Theory-cum-Practical course is permitted to appear for supplementary examination by retaining the Continuous Assessment already earned in the next two attempts of his/her choice. For further attempts, only the marks earned in the supplementary examination will be considered for passing the course as prescribed in the Scheme of Examinations (Minimum Marks for Pass).

11.4 Project work

The Head of the Department shall constitute a review committee comprises of Head of the Department or Faculty member nominated by Head of the Department and two

faculty members. There shall be three assessments (each 50 Marks), based on the rubrics, during the semester 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 averaged and rounded off to the nearest integer to 50 marks.

- 11.4.1** A student may, however, in certain cases, be permitted to work on the project in an Industrial/Research Organization, on the recommendation of the Head of the Department, with the approval of the Head of the Institution. In such cases, the Project work shall be jointly supervised by a faculty member (Guide) of the department and an Engineer / Scientist from the Organization and the student shall be instructed to report the progress in periodically and to attend the project review committee meetings for evaluating the progress. These students will produce a certificate of attendance from the Industry/ Research Organization where the project is done.
- 11.4.2** If the project report is not submitted on or before the specified deadline, an extension of time up to a maximum limit of 30 days may be given for the submission of project work with due approval obtained from the Head of the Department.
- 11.5** Every faculty member is required to maintain an Attendance and Continuous Assessment Record which consists of attendance marked for each lecture or practical or project work classes, the tests & assignment marks and record of class works (topics covered) separately for each course.
- 11.6** If any student appears as a Private Candidate for Supplementary Examinations, the continuous Assessment Marks earned by the student will be nullified and only the marks earned in the supplementary examination will be considered for passing the course as prescribed in the Scheme of Examinations (Minimum Marks for Pass)

12 0 ELIGIBILITY FOR PASS IN EACH COURSE

- 12.1** A student who secures not less than 50% of total marks (both continuous assessment and terminal examination marks put together) prescribed for the courses with a minimum of 50% marks prescribed for the end semester Terminal examination in theory courses, Theory-cum-Practical courses, practical courses (except for the Practical Courses which are evaluated based on Continuous

Assessment only) and project work shall be declared to have passed the examination.

12.2 If a student fails to secure a pass in a particular course, it is mandatory that he/she shall register for that course in the subsequent semester and attend the end semester examination. He/she should continue to register and appear for the examination till he /she secures a pass. If the theory or Theory-cum-Practical course, in which the student has failed, is an elective, the student may register for the same or any other elective in the subsequent semesters (vide 6.7.2).

12.3 A student who secures not less than 50% of total marks in the courses which are evaluated using continuous assessment only, shall be declared to have passed the examination. If a student fails to secure a pass, it is mandatory that he/she shall register and repeat the course when it is offered next. He/she should continue to register and repeat the course till he/she secures a pass.

12.4 Award of Grades

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

Letter Grade	Grade Points*
O (Outstanding)	10
A + (Excellent)	9
A (Very Good)	8
B + (Good)	7
B (Average)	6
C (Satisfactory)	5
RA (Re-appearance)	0
SA (Shortage of Attendance)	0
W (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 7.3) and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet.

"RA" denotes that the student has failed to pass in that course.

"W" denotes withdrawal from the exam for the particular course.

The grades RA and W 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 RA is given to Theory Courses/ Laboratory Courses it is not required to satisfy the attendance requirements, but has to appear for the end semester examination and fulfil the norms specified in clause 7 to earn a pass in the respective courses. If the grade RA 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 7 to earn pass in the course. However, attendance requirement need not be satisfied.

13.0 ISSUE OF GRADE CARD

13.1 The consolidated grade card will be issued, through the head of the department, when the student is declared to be eligible for the degree. The consolidated grade card will contain the following information:

- i. The courses for which credits are earned
- ii. Grade obtained in each course
- iii. Cumulative grade point average earned during the course
- iv. Month and year of successful appearance
- v. Course code and title

13.2 Grade Card will be issued at the end of each semester examinations. The Grade Card will contain the following information:

- i. The credits registered and earned in the particular semester
- ii. Grade obtained in each course
- iii. Grade point average earned in the particular semester
- iv. Cumulative grade point average earned until the semester.
- v. Course code and title.

14.0 ELIGIBILITY FOR THE AWARD OF DEGREE

A student shall be declared to be eligible for the award of the degree if he/she has satisfied the following

- a. A student seeking B.E./B.Tech. degree shall be required to undergo the prescribed courses of study and evaluation in the college for the specified duration and to pass all the examinations prescribed therefore.
- b. He/ she should register for the courses prescribed in the curriculum of the respective degree programme, fulfill the requirement of credits in each category of credit distribution, pass in all mandatory courses in the curriculum and earn the

total minimum number of credits (160 credits for regular admission students and 120 credits for lateral entry admission students).

- c. The maximum time limit for the completion of the B.E./B.Tech. Degree programmes will be 8 (Eight) years from the date of admission to the first semester of the programme and 7 (Seven) years for the lateral entry students from the date of admission to the third semester of the programme.
- d. The student completes the NCC / NSS /Sports requirements.
- e. No disciplinary action pending against the student.

15.0 CLASSIFICATION OF THE DEGREE AWARDED

15.1. First class with Distinction

A student who qualifies for the award of degree (vide clause 14.0) having passed the examination in all registered courses in his / her first appearance (including industry supported courses and online courses), within FIVE years (FOUR Years for Lateral Entry students) including the authorized Break of Study of One Year, and securing a CGPA of not less than 8.50 shall be declared to have passed in First class with distinction and should not have been prevented from writing end semester examination due to lack of attendance in any of the courses.

The authorized break of study (vide clause 16.0) and withdrawal from the examination (vide clause 17.0) will not be counted as an attempt.

15.2. First Class

A student who qualifies for the award of degree (vide clause 14.0) having passed the examination in all the courses within FIVE years (FOUR years for Lateral Entry students) including the authorized Break of Study of One Year and securing a CGPA of not less than 7.00 shall be declared to have passed in First class. The authorized break of study (vide clause 16.0) and withdrawal from the examination (vide clause 17.0) will not be counted as an attempt.

15.3. Second Class

All other students (not covered in 15.1 and 15.2) who qualify for the award of degree having passed the examination in all the courses and fulfilling the requirements given in clause 14.0 above shall be declared to have passed in Second Class.

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

16.0 TEMPORARY BREAK OF STUDY FROM A PROGRAMME

- 16.1.** A student is not normally permitted to break the study temporarily. However, if a student intends to temporarily discontinue the programme in the middle for valid reasons (such as accident or hospitalization due to prolonged ill health) and to rejoin the programme, he/she shall apply in advance to The Principal, through the Head of the Department stating the reasons, in any case, not later than the last lecture day, provided he/she fulfills the requirement in Clause 7.0.
- 16.2** The student permitted to rejoin the programme after the break shall be governed by the rules and regulations in force at the time of rejoining.
- 16.3** The duration specified for passing all the courses for the purpose of classification vide Clause 15.1 and 15.2 shall be increased by the period of such break of study permitted.
- 16.4** 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 14.0 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 16.5** If any student is detained for want of requisite attendance, progress and good conduct, the period spent in that semester shall not be considered as permitted 'Break of Study'.

17.0 PROVISION FOR WITHDRAWAL FROM THE EXAMINATIONS

- 17.1** A student will be permitted to withdraw in any one of the semesters except first semester (Third semester for lateral entry students) during the entire duration of the degree programme for valid and genuine reasons by making an application in the office of the Controller of Examinations through the respective Head of the Department, at least one day in advance of the last theory examination in that semester. When he /she appear subsequently, he / she have to appear for all the courses of that semester on registration and payment of fees. Subsequent appearance will not be counted as separate attempt.

- 17.2** Those students who withdraw are eligible for the award of First Class and First Class with Distinction as per the requirement in this regard. However he / she will not be considered for ranking.
- 17.3** Withdrawal is permitted ONLY ONCE during the entire duration of the degree programme.
- 17.4.** Withdrawal is not permitted to the student who has not satisfied the conditions prescribed in clause 7.0 as requirements for appearing in the end semester examination.
- 17.5.** Withdrawal is permitted for the end semester examinations in the final semester, only if the period of study the student concerned does not exceed 5 years as per clause 15.1.

18.0 DISCIPLINE

18.1 Every student is required to observe discipline and decorous behavior both inside and outside the college and not to indulge in any activity, which will tend to bring down the prestige of the college. The Principal shall constitute a disciplinary committee to enquire into acts of indiscipline and notify the institution about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a special committee shall be constituted by the Head of the Institution for taking the final decision.

18.2 If a student indulges in malpractice in any test/examinations, the student shall be liable for punitive action as prescribed by the College from time to time.

19.0 REVISION OF REGULATIONS AND CURRICULUM

The standing committee/Academic Council of the College reserves the right to revise or change or amend the regulations, the scheme of examinations, the curriculum and the syllabi from time to time if found necessary.

20.0 SPECIAL CASES

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

THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI 625015

B.E./B.Tech. Regulations

Clause 4.14 Research Publication


A student who is having a minimum of 7.0 CGPA (up to the third semester) and without having any standing arrears can register for the course on 'Research Practice' at the beginning of their Fourth Semester. The outcome of the course will be a publication in SCI / SCI-expanded / SCOPUS indexed Journal / Conference in Science and Technology. The number of Credits for this course is 3. A group of a maximum of two (2) students can register for this course and they should be the first two authors. The student shall work under any TCE faculty advisor who has published at least 3 papers in SCI/ SCI expanded/SCOPUS-indexed journals. The faculty advisor is a third and the corresponding author. The student can earn the credits in the subsequent semesters (Fifth to Seventh). When the student provides the evidence of the research article publication (before starting the Fifth/ Sixth /Seventh-semester course enrolment), the grades and credits will be awarded in the subsequent semester. The grades will be awarded as per the details in the following Table.

S.No	Category of Journal	Grade
1	One Research Paper in SCI/SCI-Expanded Journal	O
2	Two Research Papers in SCOPUS-indexed Journals	O
3	One Research paper in SCOPUS indexed Journal	A+
4	One Research Paper in SCOPUS indexed Conference	A

If the student is not able to publish within sixth semester, the registration will be automatically canceled and he/she has to meet the credit requirements for the elective category by registering necessary elective course in the seventh semester, if required. Further, if a student has not registered for this research course in the fourth semester but meets all the requirements, then the student will be allowed to replace his/her grade and credits which is earned from this research course. The grade and credits for this course will be transferred under programme elective for expanded scope category.

Approved in 64th Academic Council Meeting on 11.01.2023


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THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI 625015
Honors and Minors for B.E./B.Tech. Degree Programmes

B.E./B.Tech. (Honors) (Specialization in the same programme)

1. The student should have earned additionally a minimum of 18 credits from **a vertical of the same programme**
2. The student should have passed all the courses in the first attempt with a minimum CGPA of 7.50
3. The students will be permitted to register for the courses from Fifth Semester onwards if the student has scored minimum CGPA of 7.50 and passed all the courses in the **first attempt** at the end of Third Semester.

B.E./B.Tech. (Honors)

1. The student should have earned additionally a minimum of 18 credits from **more than one vertical** of the same programme
2. The student should have passed all the courses in the first attempt with a minimum CGPA of 7.50
3. The students will be permitted to register for the courses from Fifth Semester onwards if the student has scored minimum CGPA of 7.50 and passed all the courses in the **first attempt** at the end of Third Semester.

B.E./B.Tech.(Minor in other Specialization)

1. The student should have earned additionally a minimum of 18 credits from any one of the verticals of other B.E./B.Tech. programmes
2. The student should have passed all the courses with a minimum CGPA of 7.50
3. The students will be permitted to register for the courses from Fifth Semester onwards if the student has scored minimum CGPA of 7.50 and passed all the courses at the end of Third Semester.

General Guidelines:

- Out of 18 credits, students can earn maximum of 12 credits in online mode: maximum of 6 credits in SWAYAM platform and maximum of 6 credits in TCE online courses.
- If a student decides not to opt for Honors, after completing certain number of additional courses, the additional courses completed by the student shall be considered in programme specific elective/ programme elective for expanded scope categories of the credit distribution, as applicable. If the number of credits exceeds than the number of credits in these categories, the courses with highest grades shall be considered for the

calculation of CGPA. Remaining courses shall be printed in the mark sheet and they will not be considered for the CGPA calculation.

- If a student decides not to opt for Minor, after completing certain number of additional courses, the additional courses completed by the student shall be considered in General Elective/Foundation elective categories of the credit distribution, as applicable. If the number of credits exceeds than the number of credits in these categories, the courses with highest grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the mark sheet and they will not be considered for the CGPA calculation.

THIAGARAJAR COLLEGE OF ENGINEERING: MADURAI – 625 015
B. E./ B.Tech. DEGREE PROGRAMMES
CREDIT DISTRIBUTION LATERAL ENTRY ADMISSION
(For the Lateral Entry students admitted in the Academic Year 2023-24 onwards)

4.0 Structure of Programmes

Sl. No.	Category		Credits	Credits
			Lateral Entry Admission (Existing)	Lateral Entry Admission (Proposed)
A.	Foundation Courses (FC)		27 – 48	22 – 36
	a.	Humanities and Social Sciences including Management Courses (HSMC)	06 - 09	06 – 09
	b.	Basic Science Courses (BSC)	09 - 12	08 – 12
	c.	Engineering Science Courses (ESC)	08 - 15	08 – 15
B.	Professional Core Courses (PCC)		44 – 45	44 – 49
C.	Professional Elective Courses (PEC)		24 – 39	24 – 39
	a.	Programme Specific Elective (PSE)	15 - 24	15 – 24
	b.	Programme Elective for Expanded Scope (PEES)	09 - 15	09 – 15
D.	Open Elective Courses (OEC)		06 – 12	06 – 12
	a.	Interdisciplinary Elective (IE)	03 - 06	03 – 06
	b.	Basic Science Elective (BSE)	03 - 06	03 – 06
E.	Project Work (PW)		12	12
F.	Internship and Mandatory Audit Courses as per Regulatory authorities (Non-Credit and not included in CGPA)		-	-
Minimum Credits to be earned for the award of the Degree			120 From A to E and the successful completion of F	120 From A to E and the successful completion of F

Existing:

7.2 Requirements for appearing for End Semester Examination for a course from Second Semester

7.2.1 A student who has fulfilled the following conditions shall be deemed to be eligible to appear for the end semester examination, (except for the first semester of study on regular admission)

- Ideally, every student is expected to attend all the classes and earn 100% attendance. Students who have earned not less than 75% attendance course wise taking into account the number of periods required for that course as specified in the curriculum.
- Students who have earned attendance less than 75% in a course will not be permitted to appear for End Semester Examination for that course. The student has to register and repeat that particular course in a subsequent semester when it is offered next. However, exemption may be given for the students who earned attendance between 65% and less than 75% in a particular course from the prescribed attendance requirement based on medical leave (hospitalization / accident / specific illness) and On Duty leave for participation in the College / University / State / National / International level Sports events (Vide clause 7.1.3) with prior approval from the principal / competent authority. Such student shall be permitted to apply for condonation to the principal through the respective Head of the Department. After the approval from the principal, the student shall be permitted to appear for the end semester examination for that course by paying the prescribed fee to the Controller of Examinations of the college. However, the students who have represented the college in NCC/NSS/Sports are exempted from the condonation fee.
- His / her progress has been satisfactory and obtained bonafide certificate in the Observation cum Record of all the Practical courses in the semester, and
- His / her conduct has been satisfactory.

Amendment:**7.2 Requirements for appearing for End Semester Examination for a course from Second Semester**

7.2.1 A student who has fulfilled the following conditions shall be deemed to be eligible to appear for the end semester examination, (except for the first semester of study on regular admission)

- Ideally, every student is expected to attend all the classes and earn 100% attendance. Students who have earned not less than 75% attendance course wise taking into account the number of periods required for that course as specified in the curriculum.
- Students who have earned attendance less than 75% in a course will not be permitted to appear for End Semester Examination for that course. The student has to register and repeat that particular course in a subsequent semester when it is offered next.
- However, exemption may be given for the students who earned attendance between 65% and less than 75% in a particular course from the prescribed attendance requirement based on medical leave (hospitalization / accident / specific illness) and On Duty leave for participation in the College / University / State / National / International level Sports events (Vide clause 7.1.3) with prior approval from the principal / competent authority. Such student shall be permitted to apply for condonation to the principal through the respective Head of Approved in 63rd Academic Council Meeting on 25.06.2022 the Department. After the approval from the principal, the student shall be permitted to appear for the end semester examination for that course by paying the prescribed fee to the Controller of Examinations of the college. However, the students who have represented the college in NCC/NSS/Sports are exempted from the condonation fee.
- If a student has shortage of attendance in all the registered courses of the current semester as per the curriculum. He/she would not be permitted to move to the higher semester and has to repeat the current semester in the subsequent year.
- His / her progress has been satisfactory and obtained bonafide certificate in the Observation cum Record of all the Practical courses in the semester, and
- His / her conduct has been satisfactory.