Rules and regulations for the conduct of Diploma programmes in Engineering/Technology/ Commercial practice/ Management in the Polytechnic Colleges recognised by the State Board of Technical Education, Kerala state.

REVISION

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DEFINITIONS

In these rules and regulations unless the context otherwise requires:

1.1 Academic Calendar

Academic Calendar means the calendar of academic activities undertaken during a semester as prescribed by the State Board of Technical Education.

1.2 Academic Year

Academic Year in relation to a programme means a period of 10 months spanning two successive calendar years, which includes instructional periods, holidays and examinations which shall invariably consist of 2 semesters, called odd and even semesters.

1.3 Course

Course means the study of an individual subject in a particular semester (traditionally referred to as subject/ paper) which shall include theory, practical, field work, project work etc.

1.4 Course Categories

Course Categories means the distribution of courses for a programme.

1.5 Credit

Credit means the sum of lecture periods in instructional hours and half the hours of practical, drawing etc. allotted for teaching the course, specified in the curriculum. A student earns as much number of credits for a course if he/ she completes the prescribed course as per the curriculum and satisfies the criteria fixed for such course by the State Board of Technical Education.

1.6 Curriculum

Curriculum for a course or programme means a written document prepared by the State Board of Technical Education which states the educational objectives detailing the integrated sequence of areas of study covered under the course or programme with detailed contents, recommendations as to the learning experiences to be given to students and methodology of student evaluation for achieving the learning objectives for the student undergoing the course or programme in each semester which among other things shall include the syllabus, theory, practical, project work, etc. and the rules and regulations contained herein.

1.7 Diploma

Diploma means a certificate, declaring that the holder has successfully completed a programme specified in the curriculum for such programme and satisfies the criteria fixed for such programme by the State Board of Technical Education.

1.8 Instructional Hour

Instructional hour means a period of instruction of 55 minutes duration.

1.9 Faculty Advisor

Faculty Advisor means a teacher who is in charge of a particular semester of a programme with the responsibility of primarily monitoring the diverse activities associated with that particular semester of a programme.

1.10 Programme

Programme means the entire course of study and examinations (traditionally referred to as course) prescribed for the same leading to the award of diploma.

1.11 Semester

Semester means a period of 5 months in an academic year, which shall include instructional periods, holidays and examinations. Odd semesters shall span from June to October. Even Semesters shall span from November to March.

1.12 Student

Student means a candidate admitted to or registered for a course or programme in accordance with these rules and regulations.

Rules and Regulations

2.1 Duration of the Diploma Programme

The duration of a programme shall be of 3 (three) academic years, consisting of 6 (six) consecutive semesters. The maximum duration permissible for acquiring diploma shall be 6 academic years from the commencement of the programme.

In case of Tool & Die Engineering, additional 12 months inplant training shall be mandatory for awarding diploma.

2.2 Medium of Instruction

The medium of instruction and examination shall be English.

2.3 Eligibility for Registration for a Programme

A pass with eligibility for higher studies in the Xth class examination (S.S.L.C) conducted by the Board of Public Examinations, Kerala State or equivalent examinations with mathematics, science and English as three of the subjects studied for engineering and technology programmes and mathematics and English as two of the subjects studied for Commercial Practice and Computer Application & Business Management programmes, recognized by the Board of Public Examinations of Kerala State.

2.4 Instructional Duration in an Academic Year

An academic year shall consist of 2 (two) semesters.

Odd semester in an academic year shall span from June to October (Including Holi- days and Examinations) and even semester in an academic year shall span from November to March (Including Holidays and Examinations).

- i. A semester normally consists of 75 days of Instruction.
- ii. A programme shall follow semester pattern, with end of semester examinations for each semester conducted by the State Board of Technical Education, Kerala State.
- iii. There shall be 7 (seven) periods of 55 (fifty five) minutes duration of instruction each day for 5 days per week.

2.5 Course Categories

The courses of study shall be in accordance with the scheme and syllabi pre-scribed in the curriculum. A programme shall consist of following course categories:

2.5.1 Foundation Courses

Foundation Courses are courses covering areas which are required to build a foundation for further studies in the programme selected by the student.

2.5.2 Common Courses

Common Courses are courses to be studied by all students admitted to a programme.

2.5.3 Basic Technology Courses

Basic Technology Courses are foundation courses which aim to bridge the courses of pure science/ social science/ commercial practice/ applied science/ management with the applied technology and elective courses.

2.5.4 Applied Technology Courses

Applied Technology Courses are professional level terminal courses through which the desired knowledge and skills are achieved by the students to perform his/ her job functions in the programme selected by the student.

2.5.5 Elective Courses

Elective Courses are integrated courses providing detailed knowledge in specific areas in the same or related course with an aim to develop knowledge and awareness in other interdisciplinary areas of study.

2.6 Minimum credits to be earned for award of diploma

A student shall acquire the minimum credits for each course/category of courses as prescribed in the curriculum and satisfy such other criteria fixed by the State Board of Technical Education, to be entitled for the award of diploma in the programme.

2.7 Programme Registration

Each student admitted to the programme shall be required to take the registration for programme. This registration shall be valid for 6 (six) academic years. If a student fails to earn the diploma within a period of six academic years, his registration shall be treated as cancelled and he/she will forfeit the credits already earned for the programme.

2.8 Semester Registration

Every student admitted/promoted to a semester has to complete the semester registration at the beginning of the semester. A unique Permanent Register Number shall be issued by the Controller of Technical Examinations to each student at the time of first semester registration. This unique number shall be used for all references such as further semester registration, examination registration and other academic activities.

2.9 Examination

- I. The examinations for a programme shall be conducted by the State Board of Technical Education in accordance with the curriculum prescribed for the programme. All candidates who have done semester registration shall register for examinations by remitting the prescribed fee whenever the Controller of Technical examinations notifies.
- II. No candidate shall be permitted to appear for end of semester examinations unless
 - (a) He/ she is certified by the principal to the effect that he/she has attended 75% of the actual instructional hours for all the courses put together in the particular semester.
 - (b) He/ she has completed all the prescribed laboratory, practical, workshop practical or any other kind of practical including drawing, field work, project work etc. as prescribed in the curriculum and so certified by the Head of Department of the concerned programme. Such certification shall be on the basis of the recommendations of the faculty handling the course.
 - (c) Students are eligible for condonation as per Govt. order in force
- III. Students who do not satisfy clauses 2.9 II above shall have to register for the same semester as and when it is offered in the institution afresh and shall have to fulfill such conditions prescribed by the State Board of Technical Education subjected to clause 2.12.
- M. A student shall have to remit the fees prescribed by the Government from time to time for registration/ re-registration for the course along with application in the prescribed form.
- V. A student shall not be allowed to re-register for a course or reappear for an examination for which he/she has gained the prescribed credits.

2.10 Promotion to next semester.

A student is promoted to the next semester only if he/she had the eligibility for appearing for the previous semester examination satisfying clause 2.9.

2.11 Roll out and readmission

A student with 15 days of continuous absence shall be removed from roll. He/she shall be readmitted only if he/she is claimed for readmission within 15 days from the date of roll out. Readmission can be sought only to the semester in which he was studying at the time of rolled out. Attendance for eligibility for appearing to the semester examination for such cases shall be counted from the commencement of the semester.

2.12 Repeating a semester

A student with less than 75% of attendance and has not condoned the shortage of attendance or has attendance less than 65% or he/ she has not completed all the prescribed laboratory, practical, workshop practical or any other kind of practical including drawing, field work, project work etc. as prescribed in the curriculum and got certified by the Head of Department of the concerned programme shall have to repeat the semester. He/she can repeat the semester only with the succeeding batch as and when it is offered in the institution and this shall be on the discretion of the Principal on being satisfied as to the genuineness of the absence. In case of scheme change, the student has to earn credits for the equivalent and additional subjects decided by the Department of Technical Education.

2.13 Assessment of students

2.13.1 **General**

The assessment of students for each course shall be done through continuous internal assessment and end of semester examinations. Internal assessment shall be conducted throughout the semester.

Internal assessment marks of theory and practical courses shall be published in the college on the dates stipulated in the academic calendar.

2.13.2 Internal assessment for Theory Courses

The maximum marks awarded for internal continuous assessment and end of semester examinations shall be 50 and 100 respectively, totaling to 150.

The weightage awarded for internal assessment marks shall be as follows:

	Criteria Component	Weightage (%)
1	Test Papers (Average of best 2)	50
2	Assignments (Minimum 3)	30
3	Attendance	20

2.13.3 Internal Assessment for Practical Courses

Internal continuous assessment and end of semester practical examinations have

1:1 weightage, with 50 marks allotted for internal continuous assessment and 50 marks for End of Semester examinations.

The weightage for internal continuous assessment marks for practical courses shall be as follows:

S. No	Criteria Component	Weightage (%)
1	Observation Note / Rough Record	20
2	Fair Record (Timely Submission, Accuracy and Neatness)	20
3	Attendance	20
4	Test	40

2.13.4 Internal Assessment for Drawing Courses

S. No	Criteria Component	Weightage (%)
1	Submission of Completed Drawing Sheets	40
2	Test	40
3	Attendance	20

2.14 Assessment of end of Semester Examinations

(Practical Courses)

- An external examiner and an internal examiner, appointed by the State Board of Technical Education, shall conduct the End of Semester examinations of practical courses.
- ii. No candidate shall be allowed to attend the End of Semester Practical Examinations unless he/she produces certified record of the laboratory/workshop/Project.
- iii. Award of marks in the End of Semester practical examinations (except Project) shall be as follows:

S. No Criteria Componen		Weightage (%)
1	Fair record	10
2	Viva Voce	20
3	Procedure & Tabulation	30
4	Conduct of Experiment	20
5	Result & Inference	20

2.14.1 Assessment of Seminar

S. No	Criteria Component	Weightage (%)
1	Relevance of Topic	10
2	Collection of Materials	20
3	Presentation (Presentation slides, delivery)	40
4	Question Answer / Discussion	10
5	Seminar Report	10
6	Attendance	10

2.14.2 Assessment of Project Work

Assessment of project work shall be in accordance with the course objective as it may differ from program to program.

2.14.3 Assessment of Industrial training/visit

Assessment of industrial training/visit shall be in accordance with the course objective as it may differ from program to program.

2.14.4 Assessment for Theory Courses

The theory courses shall be accessed through end of semester examinations, con-ducted by the State Board of Technical Education, Kerala. The Duration of the end of semester examination shall be 3 hours. Question papers shall be prepared based on:

- i. Emphasizing Knowledge Testing, Problem solving & Quantitative methods.
- ii. With sufficient data and related information on problems given.
- iii. Covering all sections of the syllabus as contained in the model question papers.

- iv. Without ambiguity and free from any defects and errors.
- v. Having clear and complete instructions to the candidates.

2.15 Pattern of question papers for theory courses

The entire syllabus for the theory course shall be divided into 4 Modules / Units. The maximum marks for the course shall be 100. Different patterns of question papers are permitted for courses involving drawing, design etc. In such cases the modified pattern should be specified along with the syllabus for the course. The model question paper will form part of the curriculum. The general pattern of question papers shall be as follows:

PART A: Short Answer Questions (One/Two Sentences) 5x2 Marks = 10 Marks

All Questions are Compulsory. There should be at least one question from each module and not more than two questions from any module.

PART B: Analytical/Problem Solving Questions 5 x 6 Marks = 30 Marks

Candidates will have to answer Five questions out of Seven. There should be at least one question from each module and not more than 2 questions from any module.

PART C: Descriptive/Analytical/Problem Solving Questions 4 x 15 Marks = 60 Marks

Two questions from each module with Choice to answer one question. Weightage for categories of questions like, recollection, problem solving, descriptive, drawing/diagrammatic etc. shall be specified along with the syllabus, if necessary. Model question paper shall be prepared for each course at the time of framing the syllabus. The model question paper along with the syllabus must be sent to the question paper setter for framing questions.

2.16 Grading System

1. The State Board of Technical Education shall award Letter Grade to students based on the marks secured by them in both internal assessment and end of semester examinations for each course.

Each Letter Grade indicates a qualitative assessment of the student's performance and is associated with specified grade points. All candidates will be allotted grades according to the marks scored by them. The grading system based on the marks scored is as follows:

S. No	Range of marks (%)	Grade	Description	Grade Points
1	90 and above	S	Outstanding	10
2	[80 to 90)	Α	Excellent	9
3	[70 to 80)	В	Very Good	8
4	[60 to 70)	C	Good	7
5	[50 to 60)	D	Average	6
6	[40 to 50)	E	Satisfactory	5
7	Below 40	F	Unsatisfactory	0

Where [X-Y] means, X included and Y excluded.

- 2. State Board of Technical Education shall issue to the students a Grade Card on Completion of each semester. The Grade Card Shall contain the following:
 - (a) The Title of the Course, Category Foundation, Common Course, Basic Technology, Applied Technology and Elective Course.
 - (b) Credits associated with and grades awarded for each course.
 - (c) The Number of Credits earned and Grade Point Average.
 - (d) Cumulative Grade Point Average.

2.17 Minimum requirements for earning credit

A candidate must secure a minimum of 40% marks in the end of semester examination for theory and a combined 40% marks for internal & external assessment put together in theory and practical courses to secure the credit for the course.

2.18 Cumulative grade point average (CGPA)

CGPA is the weighted average of grade points obtained in all courses registered for the diploma programme.

CGPA shall be computed for all the students at the end of each semester by taking into consideration their performance in all semesters as follows:

$$CGPA = \underbrace{ \begin{array}{c} \sum\limits_{i=1}^{n} C_{i}G_{i} \\ \hline \sum\limits_{i=1}^{n} C_{i} \\ \hline i=1 \end{array}}$$

Where n is the number of courses registered up to that semester, Ci is the number of credits allotted to ith course as per the scheme and Gi is the grade points corresponding to the grade awarded to the student for the course.

CGPA shall be rounded off to the second place of decimal and recorded as such for representation. Whenever the CGPA are to be used for determining the merit ranking in a group of students only the rounded off values shall be made use of.

Percentage of marks can be computed from CGPA as:

Percentage of marks = CGP A * 9.5%

2.19 Classification

To be eligible for the award of diploma for a particular programme a student should earn the requisite number of credits through successful completion of the courses of study.

There will be three classifications of successful candidates:

- 1. First Class with Distinction.
- 2. First Class.
- 3. Second Class.
- i. A candidate who has earned the requisite number of credits will be classified as First Class with Distinction based on the CGPA attained if, -he/ she secures the requisite credits and CGPA of 8(eight) or above and fulfills the requirements for the award of diploma within 3 (three) consecutive years including the year of registration for the programme.
- ii. A candidate who has earned the requisite number of credits will be classified as First Class based on the CGPA attained if, he/ she secures the requisite credits and CGPA of 6.5 or above and fulfills the requirements for the award of diploma within 4 (four) consecutive years including the year of registration for the programme.
- iii. All other successful candidates shall be declared to be placed in Second Class.
- iv. Provision for awarding rank in each programme will not be in existence

2.20 Grace marks

Grace marks (if any) earned by the student is restricted to a maximum of 10 marks for each course. In the case of Differently abled students, the grace mark will be awarded as per the Govt. Order in force

2.21 Academic Monitoring System

Academic monitoring shall be performed either in person or through online Academic Monitoring System by the State Institute of Technical Teachers Training and Research, Kalamassery in order to monitor the academic activities in the institution and verification of documents concerned.

2.22 Academic Calendar

The academic calendar shall be prepared by Department of Technical Education and shall be followed in all Polytechnic colleges.

2.23 Examination Monitoring Cell

The Principal shall constitute an Examination Monitoring Cell at the Polytechnic for supervising the academic activities. This cell shall have a senior staff member as convener and three members of which one shall be a woman. The duties and responsibilities of the Examination Monitoring Cell shall be

- i. To officiate as the examination squad to keep a vigil on all end of Semester Examinations. If any malpractice are found/ reported by the invigilator principal shall be appraised of the same with a report. The Principal shall forward such complaints to the Controller of Technical Examinations.
- ii. To receive any complaints from the students regarding issues like out of syllabus questions, printing mistakes, insufficient data etc of end of Semester examinations of Theory and Practical courses. The cell shall make a preliminary investigation of the complaint and if necessary forward it to the Controller of Technical Examinations through the Principal with specific comments.
- iii. To receive any complaints from students regarding internal examinations, make preliminary enquiry of such incidents and give report to Principal for necessary action.

2.24 Departmental Committee

Principal of the Polytechnic College shall form departmental committee for each department. The committee shall function during the entire semester of each academic year. The departmental Committee shall consists of the Head of Department, faculty advisor and three student representatives (one of them shall be a woman) from each class. The committee shall meet and deliberate at least for 2 times a semester. It shall be the responsibility of the Head of Department to convene these meetings. The decisions of the Departmental Committee shall be recorded in a register for further reference. The Departmental Committee shall communicate its comments to the Principal.

The departmental committee shall,

- i. Review periodically the progress and conduct of the students in the class.
- ii. Discuss any problems concerning any course in the semester concerned.
- iii. Identify weaker students in the class and suggest remedial measures for helping him/her.
- iv. Review teaching effectiveness and coverage of syllabus.
- v. Discuss any other academic issues.

2.25 Anti - Ragging Cell

The Principal shall form an Anti - Ragging Cell at the commencement of each academic year. The cell shall function as per the orders and guidelines issued by the Government in this regard.

