

**POLYTECHNIC  
EDUCATION**



**Academic Regulations**

# Diploma Programme Rules and Regulations

Applicable from the academic year 2022-23 onwards

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Applicable for the students admitted into first year from the academic year 2022-23 onwards

## 1. INTRODUCTION

This document contains the academic regulations, curricula and course contents for governing the conduct of 3-year Diploma degree programmes offered by VFSTR in the following specializations:

- Diploma in Computer Science & Engineering (DCSE)
- Diploma in Electronics and Communication Engineering (DECE)

The 4-character codes indicated in parentheses are their specialization codes. For the above specializations, the regular courses including theory and practical are offered over a period of six semesters.

The students enrolled for these programmes have to complete the prescribed courses to earn a minimum of 124 credits to become eligible for the award of the Diploma degree.

### **Courses and Course Credits:**

The term course is used in a broader sense to refer to 'Theory Subject', 'Laboratory', 'Summer Project/Internship', 'Major Project' etc. A course can be of theoretical or practical nature, and certain number of credits are allotted to it depending on the number of hours of instruction required per semester for completion of the corresponding course. For a course offered in a semester, one hour of lecture / tutorial instruction carried out in a week is considered equivalent to one credit, where as one and two hours of Practical courses done in a week are considered equivalent to half and one credits respectively. A student earns these credits when he/she complete the same successfully. Credits can also be obtained by successful completion of other recognized co-curricular and extracurricular activities such as NCC, NSS, Yoga, Dance, Music, Painting, etc. The details of credits of such activities will be provided by the respective course coordinators and evaluation of the activities will be carried out objectively by the constituted committees appointed by the Dean Academics Assessment and Awards. The criteria of evaluation will include aspects like regular attendance in the programme and satisfactory completion of it through tests conducted at University level or by participation / performance at university level events, state level or national level participation etc.

### **Academic Administration**

The academic programmes of VFSTR are governed by the rules and regulations approved by the Academic Council from time to time. The various academic activities are conducted following a fixed time schedule duly approved by the Academic Council in line with the

AICTE regulations. The academic activities of VFSTR are followed meticulously as specified in the academic calendar and approved by the Academic Council. The academic calendar is handed over to all the students in the beginning of the respective academic year. The curriculum and the course contents of all the programmes are discussed by the respective Board of Studies (BoS), analyzed and recommended for implementation. The Academic Council, being the highest academic body, chaired by the Vice-Chancellor, meets at least twice or thrice a year and discusses, suggests and approves all the important academic matters related to curriculum and course contents in particular including the recommendations of BoS.

## 2. CURRICULUM

Each specialization of the programme prescribes semester-wise curriculum encompassing theory courses, practical courses, and theory courses integrated with practical sessions. The theory courses comprise of lectures (and tutorials in the form of assignments wherever required) whereas the practical courses include laboratory instructions and practical sessions. Amalgamation of theory courses with practical sessions is predominantly seen in this curriculum. The curriculum and the course contents document provides details of semester wise scheme of instructions and examinations, and detailed syllabi with text / reference books recommended, course outcomes, skills acquired and the projects / assignments that are to be performed for each course. Swapping of the courses between semesters is normally done for operational advantage and convenience of the students. The overall distribution of credits for various categories of courses in the curriculum of Diploma programmes is represented in Table-1 as given below.

**Table-1:** Percentage distribution of credits for various categories of courses (Percentage adjusted to the nearest digit)

S. No	Course Category	Credits	AICTE Recommendation	AICTE %
1	Humanities & Social Science	9	8	6.66%
2	Basic Science	17	19	15.84%
3	Basic Engineering	16	15	12.5%
4	Professional Core	45	45	37.5%
5	Program Elective (Branch specific)	12	12	10%
6	Open Electives	9	9	7.5%
7	Summer Project/Internship, Project work	12	12	10%
8	Audit Courses	4	0	0%
<b>Total</b>		<b>124</b>	<b>120</b>	<b>100%</b>

## 2.1 Semesters

The University follows the semester system. There are two regular semesters and one summer semester.

**2.1.1 Regular Semesters:** The regular semester that begins in July/August is known as odd /first semester and the one that begins in December is known as even / second semester. The instructional days for a regular semester shall be a minimum of 90 working days exclusive of end-semester examination days.

**2.1.2 Summer Semester for Course repeaters:** To support the slow learners, who were unable to complete/clear their courses during the regular semester, a 'summer semester' may also be organized during the summer vacation period of May - June, in accordance with the rules stipulated by VFSTR. However, the summer semester courses shall be offered subject to academic and administrative convenience.

## 2.2 Choice Based Credit System (CBCS)

Each specialization of the Diploma programme comprises of a set of courses that include individual theory, practical, projects individually or in combinations. These courses are of basic sciences, humanities, basic engineering, professional core, electives, life skill courses. VFSTR offers flexibility for students to choose courses of their choice and obtain the credits provided they satisfy the minimum credits criterion in each category.

Table-1 provides the comparison of VFSTR course structure with the recommended structure of AICTE as per the model curriculum recently released by AICTE. It shows that VFSTR curriculum has broadly conformed to the guidelines of AICTE while providing enough choice to students to choose the courses of their domain of interest as well as courses that offer life skills and employability.

- a) Majority of the basic science courses, basic engineering courses, humanities and general life skill courses are offered commonly to students of all specializations of study.
- b) Basic science courses are included to offer the knowledge of scientific theories that form the foundation for all the engineering solutions. Basic engineering courses are those that every candidate, irrespective of his specialization, ought to understand to perform well in his/her discipline. Engineering drawing, Engineering workshop, Computer programming are some of the courses that fall in this category.
- c) Professional Core courses are mentioned separately for each programme and they are mandatory for every student opting for that specialization. These are designed to offer the essential fundamental knowledge and skills required for that specific programme.
- d) Elective courses offered for each programme are categorized as 'department electives' and 'open electives'. 'Department electives' are those courses that are aimed at offering the advanced/additional knowledge in the chosen area of specialization. The elective courses offered by other departments are mentioned as 'open electives' or 'inter-departmental electives'. These electives are offered to enable students understand interdisciplinary nature of courses. Wherever it is not possible to offer courses as a 'stream', such courses are offered as individual elective courses as well. This will also provide scope for inclusion of individual subjects of current technologies or subjects that are of research/industrial importance.

- e) In 'electives' category, a student is required to secure a minimum of 21 credits. These credits can be obtained by taking courses of his/her own program or through a combination of courses from his/her own program and other programs.

**2.2.1 Open Elective Courses:** 'Open electives' are those courses that are offered by other departments, other than the parent department. They offer courses as streams or as individual courses. A student can opt for a stream or individual course of other departments only if she/he fulfils the prerequisites as defined by the respective host department. This is aimed at encouraging the interdisciplinary studies.

**2.2.2** Elective courses are spread over fifth to sixth semester, to enable students earn credits from a chosen stream or individual courses. A student's enrollment for pursuing an open elective course(s) is based on his/her choice and order of merit and subject to availability of seats.

**2.2.3** Physical fitness, Sports and games: As physical fitness contributes to physical, mental and social development, it is offered to students. The credits are spread across 2 semesters from I-I to I-II with 1 credit per semester. Students are imparted training through physical exercises and are tested for their ability.

**2.2.4 Life Skills:** Realizing the VFSTRs Vision of preparing multifaceted personalities, VFSTR floats various credit based life skill activities for students such as yoga, dance, music, NSS etc., during the II year

### **2.3 Minor Project – I & II**

Some common guidelines applicable to these projects are given below.

The progress of project is reviewed thrice in a semester by the "Project Review Committee" and internal marks are awarded based on these reviews. The Project review committee consists of

- a) Head of Department or his/her nominee – Chairman
- b) A senior faculty member identified by the HoD - Member
- c) Project Supervisor – Member

Review schedules of PRC are to be announced by the department immediately after the commencement of the class work. The review presentations are open to all the students of that section and attendance is compulsory. The first review should be of minimum 15 minutes/batch; the second and third reviews should be around 30 minutes/batch. The detailed assessment guidelines and scheme are to be announced along with the assessment schedule. The following aspects may be considered by the committee for assessment.

**First Review:** (for 15 marks, within three weeks after commencement of class work)

Points to be considered during the review

- a. Identification of specific area out of broad areas under the supervisor
- b. Identification of outcomes in line with programme objectives
- c. Feasibility of contributing to the attainment of outcomes

- d. Identification of tools/equipment/training needs/ etc.
- e. Understanding by individual students on the overall aspect of the project

**Second review:** (for 15 marks, after seven or eight weeks)

Points to be considered during the review

- a. Completion of literature survey
- b. Design of equipment set up
- c. Acquisition/learning of the tool required
- d. Readiness of about 25% documentation
- e. Progress review as per mechanism/ schedule identified
- f. Individual student contribution in above activities (a to e)
- g. Structure of project report

**Third review:** (for 20 marks, after 14 weeks)

Points to be considered during the review

- a. Presentation of results and conclusions
- b. Meeting of objectives defined in first review
- c. Preparation of report
- d. Understanding by individual students on the overall project
- e. Individual student contribution
- f. Progress of project as per schedule

Evaluation scheme of Minor Project – I & II

Phases	Component		Marks%	Type of Assessment
Phase 1	Understanding the area Feasibility of the project/ Identification of the requirements/Outcome / Scheduling of the work	Review-I (15 Marks)	50	Internal
		Review-II (15 Marks)		
		Review-III (20 Marks)		
Phase 2 (After submission of report)	Report / Results and Presentation towards Fulfilment of outcomes		50	External

**2.4 Industry Internship:** A student can undertake internship in industry during summer semester after fourth semester. It bears a weightage of 5 credits. This is aimed at training students in solving/understanding real-life problems through application of engineering analysis, design, evaluation and creation, particularly in association with practitioners and experts in the industry.

**2.5 Major Project:** While all the students are expected to undergo major project work at VFSTR and submit their report which is a mandatory requirement for the award of degree. It bears a weightage of 4 credits with a duration of one year. The student under the guidance of a faculty member(s) in the last semester will involve in an innovative design/research through the application of his/her knowledge gained in various courses studied. He/she is therefore expected to present a survey of literature on the topic, work out a project plan and carry it out through experimentation/ modelling / simulation / computation. Through such a project work, the student is expected to demonstrate system analysis, design, presentation and execution skills.

**2.6 Assignments:** Assignments are being given for some of the courses which will focus on thinking abilities of students. Assignments can be done during or after class hours as part of tutorials. Different kinds of analytical problems can be given which will focus on thinking abilities of students. These assignments need to be evaluated by teacher handling that particular class.

### **3. ACADEMIC REGISTRATION**

At the beginning of every semester, the student must register for all the courses by submitting an application in the prescribed format giving the details of the same. The semester fee must be cleared along with all the other pending dues. The allotment of courses including electives, and internships are done based on the availability of seats, with the consent of the department.

### **4. MINIMUM ATTENDANCE REQUIREMENT**

It is mandatory for the student to attend the course work in each semester as per the academic schedule of that semester. VFSTR expects 100% attendance. However, aggregate attendance obtained for each and every semester shall not be less than 80 % of the aggregate of maximum instruction periods taught for all the courses put together.

#### **4.1. Shortage of Attendance**

- a) The shortage of attendance in aggregate may be condoned up to 10% on the ground of ill-health and other emergencies
- b) Documentary evidence like medical reports and certificates issued by concerned bodies is to be produced on time and subjected to the scrutiny of a committee constituted for this purpose by the Vice-Chancellor. The decision of the committee shall be final.
- c) However, this condonation can be availed only once during the entire programme. The student who fails to satisfy the above, shall be detained and not promoted to the next semester. Such students shall have to repeat that semester as and when it is offered.
- d) A special committee chaired by Vice Chancellor and consisting of Dean Academics, Assessments and Awards will review the list of detainees and give their final decision.

## **5. MINIMUM ACADEMIC REQUIREMENTS FOR PROMOTION TO THE NEXT YEAR**

In addition to the attendance requirement, a student shall earn a minimum of 50% of the credits from the courses prescribed every year to continue in the programme in the subsequent year.

Such students will become eligible to rejoin the programme only after obtaining the required number of credits. A special committee chaired by Vice Chancellor and consisting of Dean Academics, Assessments and Awards will review the list of detainees and give their final decision.

## **6. MAXIMUM ALLOWED DURATION OF STUDY**

A student is expected to complete the Diploma programme in three years. However, if a student is unable to complete the programme within the stipulated period, he/she will be allowed a maximum of five years to complete the programme.

## **7. EVALUATION**

Teaching-Learning and Evaluation should go hand in hand and complement each other. Continuous evaluation plays a vital role to enable the student to get synchronized with the teaching-learning process. Evaluation methods adopted in the university are aimed at testing the learning outcomes in tune with the outcome based model of education. The focus, is thus on assessing whether the outcomes are realized by the end of the course.

### **7.1 Internal and End-semester Evaluation**

The performance of a student in each course is evaluated on a continuous basis during the semester through various in-semester and end-semester examinations. The marks awarded through continuous evaluation are referred to as internal marks. The marks awarded through end-semester examinations are referred to as external marks. Both the internal and external marks are considered for awarding the final marks and the grade point in that course.

- a) For each course, the maximum sum of internal and external assessment marks finally considered is 100, in the ratio of 40:60 for theory based courses and theory-practical integrated courses, and 50:50 for pure practical based courses.
- b) To clear a course, a student must secure at least 50% of the total maximum marks which is inclusive of internal and external marks out of which a minimum of 40% must be scored in the end semester examination.

### **7.2 Marks Distribution**

#### **7.2.1 Theory Courses**

The distribution of marks and scheme of evaluation for a theory course are given below in Table-2.



**Table-2:** Distribution of Marks for Theory Courses

S. No.	Component	Marks (%)
1	Continuous Evaluation:	
	a. Attendance	02
	b. Periodic Assignments / Tests	18
	c. Mid – Semester Tests	20
2	End-semester Examination	60
<b>Total Marks</b>		<b>100</b>

**7.2.2 Theory courses integrated with Laboratory**

For a theory course in which laboratory is integrated, the distribution of internal and external marks is as given in Table-3.

- Attendance for both theory and laboratory end examinations is mandatory for these subjects.
- A minimum of 40% marks in end examination is to be secured for theory and laboratory separately in order to pass these courses.

Detailed procedure of evaluating the individual components mentioned in Table-3 is presented in the following sections.

**Table-3:** Distribution of Marks for Theory Courses integrated with Laboratory

S. No	Component	Marks distribution when				
		L=2 or 3, P=2	L = 3 and P = 3 or 4	L = 2 and P = 3 or 4	L=2 or 3 and T=2	P=3 or 4
1	<b>Continuous Evaluation</b>					
	<b>Theory Attendance</b>	2	2	2	2	-
	Periodic Assignments / Tests	12	8	5	18	30
	Mid Semester Tests	14	10	8	20	-
	Laboratory Internal	8+4	20	17+8	-	20
2	<b>End-Semester Examination</b>					
	a. Theory	47	40	35	60	
	b. Laboratory External	13	20	25		50
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

### 7.3 Description of individual components in evaluation

#### 7.3.1 Attendance

Regularity and punctuality are essential attributes of a professional life. These can be inculcated to the students through practice during their campus life. For motivation and as incentive, some marks are also awarded for each course based on the percentage of attendance in that course, as per the details given in Table-4.

**Table-4:** Marks for Attendance

S. No	Attendance %	Marks
1	$\geq 90$	2
2	$<90$ but $\geq 80$	1

#### 7.3.2 Periodic Assignments / Tests

In tune with the spirit of continuous evaluation which in turn promotes continuous learning and for preparing the students ready for the subsequent classes, periodic assignments/tests are conducted on the covered syllabus, once every two weeks.

- The results of the tests are to be normally announced within three working days on completion of the examination and the performance is to be discussed in the class.
- To award the marks under this category, the average of the best marks obtained in the tests (in the ratio of best two scored tests out of three conducted) are considered.

The schedule of these tests and the pattern of question paper are to be announced well before the commencement of each semester.

#### 7.3.3 Mid Examinations

Three mid-semester examinations of 90 minutes duration each, phased out evenly over the semester, are conducted to assess the assimilation of contents covered during that period.

- The average marks of the two best scored mid-semester examinations will be considered for arriving at the 80% of the total marks allotted for mid examination. The least scored mid-semester examinations will be considered for the remaining 20% of total marks. The schedule of these examinations will be announced well in advance through the academic calendar.
- The question paper consists of three parts with marks distributed as given in Table-5.

**Table-5:** Mid Examination Question Paper Pattern

Part No.	No. of Questions	Marks for each Question	Total Marks / part	Choice
1	10	1	10	No
2	2	5	10	Internal
3	1	10	10	Internal
<b>Total Marks</b>			<b>30</b>	

The type of questions will be in line with the course outcomes, aimed at testing the attainment of those outcomes, which will fall within the specified syllabus.

- c) The results of the mid examinations are to be announced within four working days on completion of the last examination.

#### 7.3.4 Summer Project/ Internship

The objectives of these projects, the number of hours and credits allocated for these projects vary based on the type of the project. However, some common guidelines applicable to these projects are given below.

- a) Summer Project/Internship: The assessment will be done in two phases first one is by a team of two senior faculty members appointed by the Head of the department and termed as internal assessment. The other assessment will be done jointly by two examiners one is from VFSTR as internal examiner and the other is from other institution as external examiner. These examiners will be appointed by Dean-Academics, Assessment and Awards from the panel of examiners suggested by the respective Head of the Department. The assessment components are given in Table 6.

**Table-6:** Evaluation scheme of Summer Project/Internship

<b>Phases</b>	<b>Component</b>	<b>Marks%</b>	<b>Type of Assessment</b>
Phase 1 (within two weeks)	Understanding the area Feasibility of the project Outcome identification Scheduling the work	50	Internal
Phase 2 (after submission of report)	Report Results and Presentation Fulfilment of outcomes	50	External

#### 7.3.5 Theory courses - End-semester examination

For each theory course, the end-semester examination shall be conducted by the university for a duration of three hours and for a maximum of 60 marks, covering the complete syllabus that is mentioned in the course contents and lecture plans.

- a) Even for the theory-laboratory combination courses, examination will be conducted for 60marks only. However, the marks will be proportionally scaled down as per the distribution mentioned in the Table5. The question paper for end-semester theory examination consists of three parts as given in Table-7.

**Table-7:** Theory Examination Question Paper Pattern

<b>Part No.</b>	<b>No. of Questions</b>	<b>Marks for each Question</b>	<b>Marks / part</b>	<b>Choice</b>
1	10	1	10	No
2	4	5	20	Internal
3	3	10	30	Internal
<b>Total Marks</b>			<b>60</b>	

#### 7.4 Practical courses – Continuous and End-semester evaluation

The detailed information consisting of experiments, batch formations, experiment schedules, etc., will be displayed/informed to the student one week before the commencement of the semester so that the student comes prepared for the session. Copies of the lab manual will be made available to the students along with the schedule. The lab manual will consist of the list of equipment, detailed procedure to conduct the experiment, format for record writing, outcomes for each experiment and possible set of short questions to help students gain critical understanding.

During laboratory sessions, a brief viva-voce is conducted for each student on the experiment he/she is carrying out on that day. Some of the parameters that could be included in the continuous evaluation are given in Table-8. The set of parameters may slightly differ from one laboratory to the other, and will be announced before the commencement of the lab session. These parameters are assessed for each laboratory session.

**Table-8:** Continuous Evaluation of Practical's

<b>S. No.</b>	<b>Component</b>	<b>Marks</b>
1	Viva and Interaction	10
2	Experimentation and Data Collection	30
3	Analysis of Experimental Data and Interpretation	10
<b>Total</b>		<b>50</b>

This assessment is carried out for each practical session and the average marks of all the sessions will be considered for awarding 30 marks allotted for continuous lab assessment. An internal laboratory examination will be conducted for another 20 marks

#### 7.4.1 The scheme of internal laboratory examination

The internal laboratory examination shall be conducted around the middle of the semester. The examination is to be conducted, by a team of two examiners, one who conducts the laboratory sessions and the other appointed by the HoD. The scheme of evaluation shall be the same as that of the end-examination for the laboratory.

#### 7.4.2 End-semester laboratory evaluation

End semester examination for each practical course is conducted jointly by both internal and external examiners. The examiners are appointed by Dean Academics, Assessment and Awards from the panel of examiners suggested by the respective Heads of the Department. To maintain the objectivity and seriousness of the students towards the lab curriculum and lab examinations, a panel of large number of examiners, four times to the actual requirement shall be suggested by the HoD, at least one month in advance and submit the details to the Dean Academics, Assessment and Awards. The Dean Academics, Assessment and Awards will select the examiners on a random basis. The scheme of evaluation may vary depending on the nature of laboratory, which shall be shared with the student by the laboratory in-charge and also stamped on the answer scripts. The general scheme of evaluation is given in Table – 9.

**Table-9:** End Semester Evaluation Pattern of Practical's

Component	Marks		
	External Laboratory Examiner	External Laboratory Examiner	Total
Objective & Procedure write up including outcomes	5	5	10
Experimentation and data collection	5	5	10
Computation of results	5	5	10
Analysis of results and Interpretation	5	5	10
Viva Voce	0	10	10
<b>Total Marks</b>	<b>20</b>	<b>30</b>	<b>50</b>

### **7.4.3 Evaluation of laboratory where practical courses are integrated with theory**

The integration of practical sessions with theory is made to reinforce the theory concepts by conducting experimentation that is based on the theory concepts learnt in the class. Even in such courses, the Laboratory component evaluation will be carried out in the same manner as that of the individual laboratory evaluation mentioned above. The internal and external marks are to be suitably scaled down depending on weightage.

### **7.5 Evaluation of Major Project**

The major projects are usually done in groups (not exceeding five students in a group), during the beginning in the V semester to end of the VI semester, under the guidance of a faculty member. Every batch of students, in consultation with the allocated guide, should define the project and also the probable procedure of carrying it out and submit the same to PRC committee. This is to avoid the repetition and also to come up with a roadmap for completion of the project within the time stipulated. The students are encouraged to select topics related to ongoing research and consultancy projects. The students are expected to carry out and present a survey of literature on the topic, work out a project plan and its implementation through experimentation / modelling / simulation / computation. They are also expected to exhibit system analysis, design, and presentation and evaluation skills. The entire process of grouping of student batches, and identification of respective guides etc., is to be completed by the end of VI semester, so that students can use the inter-semester break for literature survey or data collection.

### **7.6.2 Project Review Committee (PRC)**

The progress of project is reviewed thrice in a semester by the “Project Review Committee” and internal marks are awarded based on these reviews. The Project review committee consists of

- a) Head of Department or his/her nominee – Chairman
- b) A senior faculty member identified by the HoD - member
- c) Project supervisor – member

Review schedules of PRC are to be announced by the department immediately after the commencement of class work. The review presentations are open to all the students of that section and attendance is compulsory. The first review should be of 10 minutes/batch; the second and third reviews should be around 30 minutes/batch. The detailed assessment guidelines and scheme are to be announced along with the assessment schedule. The following aspects may be considered by the committee for assessment.

**First Review:** (for 10 marks, within three weeks after commencement of class work)

Points to be considered during the review

- f. Identification of specific area out of broad areas under the supervisor
- g. Identification of outcomes in line with programme objectives
- h. Feasibility of contributing to the attainment of outcomes
- i. Identification of tools/equipment/training needs/ etc.
- j. Understanding by individual students on the overall aspect of the project

**Second review:** (for 20 marks, after seven or eight weeks)

Points to be considered during the review

- a. Completion of literature survey
- b. Design of equipment set up
- c. Acquisition/learning of the tool required
- d. Readiness of about 25% documentation
- e. Progress review as per mechanism/ schedule identified
- f. Individual student contribution in above activities (a to e)
- g. Structure of project report

**Third review:** (for 20 marks, after 15 weeks)

Points to be considered during the review

- g. Presentation of results and conclusions
- h. Meeting of objectives defined in first review
- i. Preparation of report
- j. Understanding by individual students on the overall project
- k. Individual student contribution
- l. Progress of project as per schedule

### **7.6.3 Major Project End Examination**

At the end of the semester, the student shall submit a comprehensive project report covering the work done. He should make a final presentation before a panel of examiners consisting of the Head of the Department or his nominee (Chairman), one external examiner, one internal examiner and project work supervisor. The external and internal examiners shall be appointed by the Dean Academics, Assessment and Awards from the panel of examiners recommended by the Head of the Department. The dates of submission of reports, presentations and scheme of evaluation shall be announced and the same are informed to the students in advance. The general scheme of evaluation is given in Table-10 below.

**Table-10:** Evaluation of Major Project

Component	Marks				Total Marks
	Guide	HoD / Nominee	External Examiner	Internal Examiner	
Relevance of the project with current trends	0	0	5	0	5
Presentation skills of student	0	5	5	5	15
Viva	0	0	5	5	10
Individual student contribution	5	0	0	0	5
Internal reviews progress / batch wise	0	0	5	0	5
Project report	0	0	5	5	10
<b>Total Marks</b>	<b>5</b>	<b>5</b>	<b>25</b>	<b>15</b>	<b>50</b>

## 7.9. Examinations Procedures

### 7.9.1 Pre Examinations

Normally, a minimum of one week of study holidays will be given to the students for preparation of the end examinations (theory). In order to maintain the academic standards, external faculty from reputed institutions are involved in the setting of the end examination question papers. The question paper will be designed to test all the outcomes listed in the curriculum, keeping in mind the abilities of the average performer in that particular course. An examination notification consisting of the details of examination fee, payment dates, application procedure etc., will be released by the office of Dean Academics, Assessment and Awards and displayed on the notice boards and also posted on the university website. Examination schedules will be announced at least one month before the commencement of examinations. A student who wants to write the external examination must submit an application and register himself to write the examinations.

### 7.9.2 During Examination

To ensure secured environment, examinations will be conducted in the halls, exclusively designated for the purpose and under CCTV surveillance. Seating arrangements will be in such a way that students who are writing the same examination are separated by at least one and half meter distance. The seating arrangements, malpractice norms, guidelines to be followed by the student during examinations will be displayed on the notice boards prominently. Special flying squads are deployed for patrolling and preventing any malpractice during examinations. Students will be subjected to scrutiny before entering into the examination halls and no electronic gadgets are permitted except calculators.



### **7.9.3 After the examination**

To ensure objectivity in evaluation, the answer scripts are encoded before evaluation and also jumbled. To assure transparency, the scheme of evaluation to be used for evaluation is made available to students and faculty through internet, and comments received will be used to revise the scheme, if needed. 10% of the total scripts are re-evaluated by senior faculty to verify the uniform implementation of the scheme during evaluation.

### **7.9.4 Results**

Results of the end examinations are announced within three weeks of completion of the last examination. Results are published on the University website, displayed prominently on all the notice boards in the university and also informed to the parents through SMS. Along with the results, recounting and re-evaluation notifications are released clearly mentioning the schedules of various such activities. In order to ensure transparency, copies of the answer script are shown to the students based on request, and to those who apply for recounting or re-evaluation. The recounting will be done in the presence of the applicant. Marks memos will be issued within two weeks after the announcement of re-evaluation of results.

### **7.10 Grades from co-curricular and extra-curricular activities**

Towards realizing the VFSTR's vision of preparing multifaceted personalities suitable not only for placements but also as socially responsible citizens and to lead a happy and successful life in future, various other activities such as NCC, NSS, yoga, music, dance etc. are encouraged and credits are awarded accordingly. Summer internships, certification courses from reputed organizations, physical fitness, sports and games, are conducted in the institution.

Detailed procedures on offering these programmes and evaluation procedures and requirements for the award of the credits for such courses are provided in the brochures and information manuals available for each programme.

### **7.11 Grading System**

For each course, a letter grade is awarded based on the absolute grading system, as shown in the Table-11:

**Table-11:** Grading information

<b>Percentage of Marks</b>	<b>Category</b>	<b>Grade</b>	<b>Grade Points</b>
90 and above	Outstanding	O	10
80 and above but less than 90	Excellent	S	9
70 and above but less than 80	Very Good	A	8
60 and above but less than 70	Good	B	7
50 and above but less than 60	Fair	C	6
Less than 50	Fail	F	0
Passed in the component but failed in the corresponding component of theory courses integrated with laboratory	Incomplete	I	--

#### **8. SUPPLEMENTARY EXAMINATIONS**

The supplementary examinations shall be conducted during summer break. These examinations are conducted for the students who have failed in their theory and practical examinations in the current or earlier semesters.

#### **9. AWARD OF DEGREE**

On successful completion of prescribed requirements of the programme, the degree shall be conferred during the convocation of the VFSTR.

For the conferment of degree, the student has to fulfill the following requirements:

- a) A bonafide student and undergone the course work of not less than three academic years and not more than five academic years from the date of joining.
- b) Successfully completed all the courses as prescribed in the respective curriculum.
- c) Acquired a minimum eligible credits i.e., 124 credits.
- d) Obtained no due certificates as prescribed by VFSTR.
- e) No in disciplinary proceedings pending against him/her.

#### **10. GRADE POINT AVERAGE**

The Academic Performance of a student is indicated every semester by the Semester Grade Point Average (SGPA) and finally by Cumulative Grade Point Average (CGPA).

### 10.1. SGPA

The Semester Grade Point Average (SGPA) shall be computed using the formula given below:

$$SGPA = \frac{\sum_{i=1}^n C_i P_i}{\sum_{i=1}^n C_i}$$

Where

n = number of courses a student got registered in the semester under consideration

p<sub>i</sub> = Grade points secured for the i<sup>th</sup> course registered in the semester under consideration.

C<sub>i</sub> = the number of credits assigned to i<sup>th</sup> course registered in the semester under consideration.

### 10.2. CGPA

The Cumulative Grade Point Average (CGPA) shall be computed for all the semesters of study completed at a given point of time. The formula shall be as follows:

$$CGPA = \frac{\sum_{j=1}^m C_j P_j}{\sum_{j=1}^m C_j}$$

where

m = number of courses student got registered in all semesters at a given point of time in the programme

C<sub>j</sub> = the number of credits assigned to the j<sup>th</sup> course

P<sub>j</sub> = grade points secured in the j<sup>th</sup> course.

## 11. CLASSIFICATION

The students who have become eligible for award of degree shall be classified based on their CGPA secured, as per the Table given below:

Sl. No.	CGPA Secured	Class / Division
1	8.0 and above	First Class with Distinction
2	6.0 and above but less than 8.0	First Class
3	Less than 6.0	Second Class

- a) Toppers in each specialization are identified, based on their academic performance (CGPA) and are awarded gold medals during the convocation.
- b) In addition, the 'Chairman's gold medal' is awarded to the 'outstanding student' based on the overall performance which includes academic, co-curricular and extra-curricular activities, campus placements and competitive examinations. A committee appointed by the Vice-Chancellor will recommend the eligible student for the award, selected from the nominations received from the departments.
- c) In addition, the institution may recognize exceptional performance such as music, dance, sports etc. and display of exceptional bravery from time to time.

## **12. CHANGE OF BRANCH**

The students can request for change of branch after completing the first two semesters of study. These requests are considered subject to the following conditions:

- a) Top one percent of the students in each branch based on CGPA at the end of the second semester subject to a minimum of one student in each branch are eligible for a change of branch.
- b) If only one student is eligible from a branch and if he/she is not willing to change specialization, the opportunity can be availed by the second or third ranker of the branch in that order.
- c) The seats must be available in the branch to which a student intends to change.
- d) The seats in the branch from which a student intends to change do not fall significantly such that it is unviable to run the programme after effecting the change.
- e) The student opting for a change should not have any backlog courses.
- f) The decision of the Institution is final in this regard.

All the above points are applicable for branch change cases based on the merit criterion. There may be branch change requests of another kind, from the students who are not able to cope up with the studies of the branch they are admitted into. All such requests are to be referred to a committee constituted for the purpose. The committee takes the decision based on the merit of each case, the availability of seats and various other factors. The decision of the committee in this regard is final

## DIPLOMA – CSE & ECE Programmes

### I Year I Semester Structure

Sl. No.	Course Title	L	T	P	C	Course Category
1	Mathematics –I	3	2	-	4	Basic Sciences
2	Applied Physics –I	2	-	2	3	Basic Sciences
3	Engineering Chemistry and Environmental Studies	2	-	2	3	Basic Sciences
4	English Proficiency & Communication Skills	2	-	4	4	Humanities
5	Engineering Graphics	-	-	3	2	Basic Engineering
6	Engineering Workshop Practice	-	-	3	2	Basic Engineering
7	Physical Fitness, Sports & Games – I	-	-	2	1	Binary Grade
<b>Total</b>		<b>9</b>	<b>2</b>	<b>16</b>	<b>19</b>	
<b>Contact Hours</b>		<b>27 hours</b>			<b>19</b>	

### I Year II Semester Structure

Sl. No.	Course Title	L	T	P	C	Course Category
1	Mathematics-II	3	2	-	4	Basic Sciences
2	Applied Physics –II	2	-	2	3	Basic Sciences
3	Basics of Computer Engineering	2	-	4	4	Basic Engineering
4	Fundamentals of Electrical & Electronics Engineering	3	-	2	4	Basic Engineering
5	Programming in C	2	-	4	4	Basic Engineering
6	Physical Fitness, Sports & Games – II	-	-	2	1	Humanities
7	Constitution of India	-	-	2	1	Humanities
<b>Total</b>		<b>12</b>	<b>2</b>	<b>16</b>	<b>21</b>	
<b>Contact Hours</b>		<b>30 hours</b>			<b>21</b>	

## II Year I Semester Structure

Sl. No.	Course Title	L	T	P	C	Course Category
1	Mathematics-III	2	2	-	3	Basic Sciences
2	Professional core - 1	2	-	2	3	Professional core
3	Professional core - 2	2	-	4	4	Professional core
4	Professional core -3	2	-	2	3	Professional core
5	Professional core - 4	3	-	2	4	Professional core
6	Professional core - 5	3	2	-	4	Professional core
7	Life Skills	-	-	2	1	Binary grade
8	NCC/ NSS/ E-cell/ Social activities	-	-	-	1	Binary grade
<b>Total</b>		<b>14</b>	<b>4</b>	<b>12</b>	<b>23</b>	
<b>Contact Hours</b>		<b>30 Hours</b>			<b>23</b>	

## II Year II Semester Structure

Sl. No.	Course Title	L	T	P	C	Course Category
1	Professional core - 6	2		2	3	Professional core
2	Professional core - 7	3	-	2	4	Professional core
3	Professional core -8	3	-	2	4	Professional core
4	Professional core - 9	2	-	2	3	Professional core
5	Entrepreneurship and Start-ups	2	2	-	3	Humanities
	Department Elective-1	2	-	2	3	Department Elective
6	Open Elective – 1	2	2	-	3	Open Elective
7	Minor Project-I	-		2	1	Project
<b>Total</b>		<b>16</b>	<b>4</b>	<b>12</b>	<b>24</b>	
<b>Contact Hours</b>		<b>32 Hours</b>			<b>24</b>	

### III Year I Semester Structure

Sl. No.	Course Title	L	T	P	C	Course Category
1	Professional core - 10	2	-	4	4	Professional core
2	Professional core - 11	3	-	2	4	Professional core
3	Professional core -12	3	-	2	4	Professional core
4	Summer Project/ Internship-I (4 weeks) after II year II Semester	-	-	4	2	Project
5	Department Elective-2	2	-	2	3	Department Elective
6	Open Elective – 2	2	2	-	3	Open Elective
7	Minor Project -2	-	-	2	1	Project
8	Essence of Indian Knowledge and Tradition	-	-	2	1	Binary grade
<b>Total</b>		<b>12</b>	<b>2</b>	<b>18</b>	<b>22</b>	
<b>Contact Hours</b>		<b>32 Hours</b>			<b>22</b>	

### III Year II Semester Structure

Sl. No.	Course Title	L	T	P	C
1	Internship / Project	-	-	30	15
<b>Contact Hours</b>		<b>30 Hours</b>			<b>15</b>

#### Credit Distribution:

S.No	Sem	Credits
1	I-I	19
2	I-II	21
3	II-I	23
4	II-II	24
5	III-I	22
6	III-II	15
<b>Total Credits</b>		<b>124</b>