

**VEERMATA JIJABAI TECHNOLOGICAL
INSTITUTE
(VJTI)
MATUNGA, MUMBAI 400 019**

(Autonomous Institute affiliated to University of Mumbai)



**Manual of Rules
For
Undergraduate Programmes Leading to
Bachelor of Technology (B Tech) (Working Professionals)**

Implemented from the batch admitted in Academic Year 2024-25

VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE

(Autonomous Institute affiliated to University of Mumbai)

Manual of Rules

For

Undergraduate Programmes Leading to
Bachelor of Technology (B Tech) (Working Professionals)

In

- 151 Civil Engineering
- 152 Electrical Engineering
- 153 Computer Engineering

INTRODUCTION

VJTI aims to establish global leadership in the field of Technology and develop competent human resources for providing service to the society. The curriculum provides broad based knowledge and builds a path for the life long process of learning and exploring. VJTI has introduced undergraduate programs for working professional. The students are admitted at the second year level of four year undergraduate course. A student needs to complete Skill courses, Humanities, Social Science and Management courses in addition to Program Core and Elective courses.

This manual sets out the rules, procedures, and requirements of the undergraduate programmes of study for working professionals that fall under the purview of Academic Council of VJTI.

The rules described in this manual are applicable to undergraduate autonomous programmes listed below:

- 151 Civil Engineering
- 152 Electrical Engineering
- 153 Computer Engineering

1. Admissions

Admissions to the second year of all the programmes are made before the start of each academic year as per the procedure finalized by the Competent Authority appointed by the Government of Maharashtra state, from time to time. Students having a Diploma in relevant branch of engineering are admitted directly at the second year of all the programmes.

The Institute reserves the right to revoke the admission made to a candidate, if it is found at any time after admission that she/he does not fulfill all the requirements stipulated in the offer of admission.

The Institute also reserves the right to cancel the admission of any student and discontinue her/his studies at any stage of studentship for indiscipline.

2. Academic Calendar and Course Registration

The academic activities of the Institute are regulated by an Academic Calendar approved by the Academic Council, and released at the beginning of each year. It is mandatory for students and faculty to strictly adhere to the academic calendar for completion of academic activities. Academic Calendar can be seen on the Institute website (<http://www.vjti.ac.in>). There are two Semesters (Terms) in an academic year (Odd semester – July to Nov; and Even semester – January to May) during which all courses specified for various degree programmes are offered.

All eligible students have to carry out course registration as indicated in the Academic

Calendar. Late registration may be permitted by the Department Academic Committee (DAC) on genuine grounds till the end of second week from the start of the semester on payment of the necessary fine. If any student fails to register as per the given schedule, the student will be solely responsible for any further loss. Such students will not be allowed to register later and may lose a year.

3. Attendance

Attendance in the class is compulsory and is continuously monitored. The Institute expects 100% attendance. However, due to ill-health or other emergency situations, absence up to 25% is considered on case-to-case basis on production of documentary proof. Any application on medical grounds should be accompanied with a medical certificate from a registered medical practitioner containing the registration number of the practitioner. In case of a student whose attendance falls short by more than 25% at the end of a semester, the DAC shall forward details of the same along with specific recommendation to Dean (Academic Programs) for further action. A student not having 75% attendance will be debarred from appearing in the semester-end examination and given a “RR” grade. Such a student is required to re-register for the same course in a subsequent semester, when the course is offered next. In case a student is unable to attend classes for more than four weeks in a semester, she/he may apply to the Dean (Academic Programs) through the DAC, for withdrawal from the semester, which means, withdrawal from all the registered courses in the semester. However, such application should be made as early as possible and latest before the start of the End Semester Examination. The attendance requirement is applicable to summer term courses also.

4. Programme Structure

All students admitted to any of the undergraduate programmes, undergo a three year - six-semester programme. Every B. Tech. programme has a prescribed course structure which in general is termed as the Curriculum. It prescribes all the theory courses, laboratory courses and other requirements for the degree and sets out the nominal sequence semester-wise. It also gives the course contents and a list of textbooks and reference books for each course.

4.1: Course Credit Structure

In general, a certain quantum of academic work measured in terms of credits is laid down as the requirements for the B. Tech. degree. A student earns credits by satisfactorily passing courses and carrying other academic activities every semester. The number of credits associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly, the credits associated with any of the other activities, as defined in scheme of instruction, are dependent upon the quantum of work expected to be put in for each of the other activity per week. Credits earned by a student are deposited by the institute in the Academic Bank of Credits (ABC) maintained by the Ministry of Education,

Government of India. It is therefore necessary and mandatory for each student admitted to VJTI to open a student account in the ABC (<https://www.abc.gov.in>). Credits deposited allows student mobility as per NEP 2020.

4.2: Theory and Laboratory Courses

Courses are broadly classified as Theory courses and Laboratory Courses. Theory courses consist of lecture (L) and tutorial (T) hours. Laboratory courses consist of practical hours. Credit (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture and tutorial hours, and a multiplier of zero point five (0.5) for laboratory hours. Thus, for example, a theory course having three lectures and one tutorial per week throughout the semester carries a credit of four (4). Similarly, a laboratory course having two laboratory hours per week throughout semester carries a credit of 1.0.

4.3 Multidisciplinary Open Elective Courses

- i) These courses will be offered in final year
- ii) Students have to earn a total of 6 credits from these open elective courses.
- iii) The Curriculum will provide the list of the open elective courses to be offered.

4.4 Programme Core Course (PCC), Programme Elective Course (PEC), Vocational and Skill Enhancement Course (VSEC):

Each student has to mandatorily earn minimum credits from the following grouping of courses:

1. Program Core Courses (PCC)
2. Program Elective Courses(PEC)
3. Vocational and Skill Enhancement Course(s) (VSEC)
4. Ability Enhancement Course(s) (AEC)

The curriculum provides the details of these courses including the credits required to be earned from them.

4.5 Project:

Project is a course wherein, under the guidance of a faculty member assigned by the Department, a student or a group of students, with not more than four students in a group, is required to do some novel work with the application of knowledge gained while undergoing various courses in the earlier semesters. The student is expected to do a survey of literature, work out a project plan and carry it out through experimentation and/ or modeling and / or computation and /or fabrication. Through the project work a student has to exhibit skills for

both analysis and synthesis. In case of group project, role of every individual should be clearly defined. The project may be carried out in an Industry as per the policy defined by the institute.

The undergraduate project carries 06 credits. The project is evaluated at the end of the semester. The final project report should be submitted in the prescribed format at least one week prior to the end of semester or by the prescribed date and assessment shall be done in the week earmarked for practical / oral examinations or otherwise as indicated in the Academic Calendar. The assessment is carried out by a committee comprising a minimum of two examiners including the guide and an external examiner.

In case a student is awarded FF grade, the student has to submit the project report afresh (even if the Project is a group project) and undergo the assessment again. Students submitting the reports late or those who have to re-submit the report due to a failure grade will have a mention “Project passed in second attempt” on their grade sheet.

The student should submit two soft bound printed copies for the assessment. After successfully completing assessment, the student /group should submit one hardbound copy to the Department for record and a softcopy for archival in library.

5 Examination / Assessment:

5.1 : Modes of Evaluation

Semester wise performance assessment of every registered student is done through various modes of examination. These include Teacher /Term work Assessment (TA), Mid-Semester Test and End-Semester Examination. Teacher/Term work Assessment may include quizzes, class tests, home assignments, group assignments, viva-voce. The course teacher will announce the modes of evaluation and distribution of weightage for each of the assessments at the beginning of the course for term work assessment. Various modes of assessment for theory and laboratory courses along with the recommended relative weightage of various components are given in this section.

5.1.1 : Modes of Evaluation for Theory Courses

The Institute follows a continuous evaluation system. A typical theory course evaluation shall have term-work assessment (TA) carried out by the course teacher, Mid-semester test (MST) and an End-semester examination (ESE). The term-work assessment (TA) will be carried out by the course teacher on the basis of at least three components like attendance (weightage not more than 10% of TA), quiz, assignments, problems, paper or report on a topic, seminar and submitted by the Course Instructor before the commencement of End Semester Examination.

The Mid-semester test will be conducted for forty marks. The end semester examination will be conducted for 100 marks. The weightage assigned to each of the evaluation

components for each course is indicated along with the scheme of evaluation in the curriculum. The weightages generally for term work assessment, mid-semester test and end-semester examination for a theory course is 20%, 30% and 50 % respectively. The course teacher shall continuously grade the performance of the student in various components of the term-work. At least five sample copies of the term-work of all courses, on the basis of which the term work assessment is done, has to be preserved in the department for a period of at least three academic years. Evaluated mid-semester examination answer books will be shown to the students after the end of mid-semester examination. If a student misses the MST due to personal illness, accident or any untoward incident, the student should apply to the Head of the department within five days of the end of the test, for permission to appear for Make-up test. Make-up test may be permitted by the Department Academic Committee (DAC) on genuine grounds. Make-up test may be conducted in the second last week of the semester on the complete syllabus of the course.

Attendance in the End Semester Examination is compulsory. If a student misses the ESE due to personal illness, accident or any untoward incident, the student should apply to the Head of the department within five days of the end of the examination, for permission to appear for Re-examination. If the student fails to produce the necessary proofs, the student will be deemed to be failed in those courses and will be awarded RR grade. The student is then required to repeat the course. The end semester examination covers full syllabus of the course.

Evaluated end-semester examination answer books will be shown to the students before declaration of the final result. End semester answer-books should be preserved by the department for a period of at least one academic year. At least five sample copies of the end semester answer-books of all courses, has to be preserved in the department for a period of at least three academic years.

5.1.2 : Modes of Evaluation for Laboratory Courses

The assessment in a laboratory course is based on turn-to-turn supervision of the student's work, her/his performance in viva-voce examinations and group discussions, the quality of their work as prescribed through laboratory journals and a semester-end practical or oral examination. It is obligatory to maintain a laboratory journal as prescribed by the course teacher. The weightages are 60% and 40% for term work assessment and end-semester examination respectively. Some laboratory courses may have 100% or a different weightage for continuous in-semester evaluation.

5.2 : Grading

The Institute follows a relative grading system. Based on the combined performance in all the assessments, the student is awarded a letter grade in every course taken by her/him in a particular semester as per the curriculum. The grade awarded to a student depends not on the student's absolute performance but performance relative to other students in her / his

class. These letter grades not only indicate a qualitative assessment of the student's performance but also carry a quantitative (numeric) equivalent called the Grade Point. The letter grades and their equivalent grade points are given as follows:

Grading Scheme		
Letter Grade	Grade Points	Indicative degree of mastery
AA	10.0	Outstanding
AB	9.0	Excellent
BB	8.0	Very good
BC	7.0	Good
CC	6.0	Satisfactory
CD	5.0	Average
DD	4.0	Marginal
FF	0.0	Very weak

Letter Grade	Explanation
AU	Audit
PP / NP	Passed / Not Passed
A / NA	Attended / Not Attended
II	Incomplete due to non-appearance in end semester examination on valid grounds.
RR	Fail due to lack of attendance during the semester or non-appearance in end semester examination without valid reason. Student is required to repeat the course.
The above grades do not have any grade points associated with them.	

A student passes a credit course if the student scores any grade from AA to DD, grade FF is the fail grade. A few credit courses may not have associated grade points and will carry PP / NP grades only, NP is the fail grade.

The II (Incomplete) grade is awarded due to non-appearance in end semester examination on valid grounds. The student has to appear for the end semester examination for the course when it is conducted next.

The RR grade is awarded if the student fails to have minimum attendance for the classes (including laboratory courses) or if the student fails to attend the end-semester examination without having any valid reasons. Such a student has to repeat that course whenever it is offered next. The option of summer term is not available to the student.

A student has to pass a course in not more than four end-semester examinations, including any re-examination (repeat examination) conducted for the course. If the student fails to do

so, the student has to repeat the course whenever it is offered next. All students have to repeat the course in classroom mode only. For courses of semester VII and semester VIII, any student may repeat the course in self-study mode under guidance of a teacher if permitted by the DAC. The weightages for term work assessment, mid-semester test and end-semester examination for a theory course during end semester re-examination is 20%, 0% and 80 % respectively.

If a student fails to appear for any of the end-semester examination due to reasons beyond control, the student should inform the Head of the department immediately but not later than five days of last examination.

A student will have a maximum of four attempts to pass a course. For the second, third or fourth attempt, the student's grade sheet will indicate "Passed in second/third/fourth attempt"

The most recent grade for the course is considered for the computation of CGPA. There is no provision for improvement of grades in individual courses.

5.3 : Divyang (Differently abled) students

Rules for Divyang students will be according to the Government Resolutions (GRs) issued by Government of Maharashtra from time to time.

5.4 : National Cadet Corps (NCC) students

Rules for NCC students will be according to the Government Resolutions (GRs) issued by Government of Maharashtra from time to time.

5.5 : Academic Malpractice

Academic malpractices are severely dealt with. In case of malpractice during any evaluation like assignments, quizzes, tests, and examinations, or any other malpractice, the case is referred to Unfair Means Committee formed for the purpose. A student is suitably punished if the unfair means committee prima facie finds the student has resorted to malpractice or any other unfair means.

5.6: Performance Indices

5.6.1 : Semester Grade Point Average(SGPA)

The performance of a student in a semester is indicated by a number called Semester Grade Point Average (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses registered by the student during the semester. For example, if a student appears for five courses (Theory/labs/Projects/ etc.) in a semester with credits c_1, c_2, c_3, c_4 and c_5 and her/his grade points in these courses are g_1, g_2, g_3, g_4 and g_5 respectively, then the student's SGPA is equal to:

$$SGPA = \frac{c_1g_1 + c_2g_2 + c_3g_3 + c_4g_4 + c_5g_5}{c_1 + c_2 + c_3 + c_4 + c_5}$$

The SGPA is calculated to two decimal places.

The SGPA for any semester will take into consideration the RR/II grades awarded in that semester. For example if a student has failed in course 4 with FF grade, the SGPA will then be computed as:

$$SGPA = \frac{c_1g_1 + c_2g_2 + c_3g_3 + c_4 * 0 + c_5g_5}{c_1 + c_2 + c_3 + c_4 + c_5}$$

5.6.2 Cumulative Grade Point Average (CGPA)

An up to date assessment of the overall performance of a student from the time the student entered the Institute is obtained by calculating a number called the Cumulative Grade Point Average (CGPA), in a manner similar to the calculation of SGPA. The CGPA therefore considers all the courses registered by the student, towards the minimum requirement of the degree the student has enrolled for, since the student entered the Institute. The CGPA is calculated at the end of every semester to two decimal places and is indicated in semester grade reports. The CGPA will take into consideration the RR/II grades awarded to the student in any semester.

A CGPA of 6.75 or above will be considered as equivalent to First Class (60%).

6 Promotion to next year for UG Programme

A student will be promoted and allowed to register for the third year if the student has acquired minimum of 28 credits in second year.

A student will be promoted and allowed to register for the fourth year if the following conditions are satisfied:

1. The student has earned a minimum of 28 credits of third year and

2. The student has no course backlog or a backlog of one course in the second year.

7 CGPA to percentage conversion

The institute follows relative grading system for evaluating student performance, hence grades obtained by students are relative to performance of other students in class over and above their own performance hence percentage equivalency cannot be certified.

However, for the benefit of the students who require to fulfill requirements of various competitive examinations, higher admissions and placements, the institute has adopted the following model of conversion of CGPA into equivalent percentage as follows:

$$\text{Equivalent Percentage} = (\text{CGPA} - 0.75) \times 10$$

8 Eligibility for the Award of Degree and Title of the Degree

The names of the students who satisfy below mentioned requirements shall be forwarded to the University of Mumbai for award of Bachelor of Technology (B Tech) (Working Professionals).

The student should have studied and passed all the courses and acquired necessary number of credits as per the requirements of a particular degree programme and as prescribed by the Institute from time to time within eight years from date of first registration to programme.

- The student should have paid all the Institute fees and dues including the dues of Department, Hostels, Library and other units.
- The student should have obtained a CGPA of at least 4.0 at the end of the semester in which she/he completes all the requirements for the award of Degree;
- No case or disciplinary action is pending against her/him.
- **Title of the degree for all students will be as follows:**
B.Tech in Civil Engineering (Working Professionals)

9 Improvement in CGPA

If a student has graduated, but wishes to improve her / his CGPA, she / he will have to appear for end semester examination of at least three courses as recommended by DAC (except for the project) of last two semesters, within two years of graduation by paying the required examination fees. Only one attempt is provided for such improvement. The result of such examination will be declared only if there is improvement in CGPA over earlier CGPA.

10. Programme duration and Re-entry option after exit

A student who fails to graduate within six years from the date of first registration to the programme shall be terminated from the programme. A student who has exited from any BTech program at VJTI can re-enter the same program within four years of exit, such that the student completes the three-year BTech Program in a maximum of six years. The re-entry option may be exercised only once during the duration of the BTech Programme.

Amendments made to these rules by Academic Council of VJTI from time to time will be binding on the students.