Bachelor of Technology

Programme Ordinance



Indian Institute of Information Technology Vadodara February 2019

Table of Content

INTRODUCTION	4
BTR 1: ACADEMIC CALENDAR	5
BTR 2: ADMISSION	6
BTR 3: ATTENDANCE AND LEAVE OF ABSENCE	7
BTR 4: CONDUCT AND DISCIPLINE	8
BTR 5: CHANGE OF BRANCH	9
BTR 6 COURSE STRUCTURE	10
BTR 7 REGISTRATION	11
BTR 7.1 Procedure For Registration	11
BTR 7.2 Eligibility For Course Registration	11
BTR 7.3 Pre-Requisite Courses	11
BTR 7.4 Withdrawal from Semester and Discontinued for Failing to Register	11
BTR 8 AUDITING OF COURSES	12
BTR 8.1 Registration of Courses for AUDIT	12
BTR 9 COURSE LOAD	13
BTR 9.1 Regular Semesters	13
BTR 10 COURSE ASSESSMENT AND MODES OF ASSESSMENT	14
BTR 10.1 Course Assessment	14
BTR 10.2 Grading	14
BTR 11 REPEATING A COURSE	16
BTR 11.1 Backlog Course	16
BTR 11.2 Grade Improvement	16
BTR 12 B.TECH. PROJECT	17
BTR 13 PERFORMANCE INDICES	18
BTR 13.1 Semester Performance Index (SPI)	18
BTR 13.2 Cumulative Performance Index (CPI)	18
BTR 13.3 Calculating SPI and CPI	18
BTR 14 MINIMUM REQUIREMENTS OF ACADEMIC PERFORMANCE	19
BTR 14.1 Academic Probation	19
BTR 14.2 Discontinued from the Institute on Account of Poor Academic Performance	19
B Tech Ordinance (2019) 2	

	the Second and Fourth Semester	19	1
	BTR 14.4 Minimum and Maximum Period for Completion of B Tech Program:		19
В	TR 15 AWARD OF DEGREE AND MEDALS		20
	BTR 15.1 The B Tech (CS) and B Tech (IT) Degree will be conferred on a student after fulfilled the graduation requirements stipulated in the curriculum (as approved by the se		20
	BTR 15.2 Final CPI and Class:		20
	BTR 15.3 Certificate of Academic Accomplishment:		20
В	TR 16 GLOSSARY		21

EXTRACTS FROM IIIT (PPP), ACT 2017

The following are the extracts from THE INDIAN INSTITUTES OF INFORMATION TECHNOLOGY (PUBLIC-PRIVATE PARTNERSHIP) ACT, 2017 (NO. 23 OF 2017)

Section 33: Subject to the provisions of this Act and the Statutes, the Ordinances of every

Institute may provide for all or any of the following matters, namely: —

- a. the admission of the students to the Institute;
- b. the courses of study to be laid down for all degrees and diplomas of the Institute;
- c. the conditions under which students shall be admitted to the degree or diploma courses and to the examinations of the Institute, and shall be eligible for degrees and diplomas;
- d. the conditions of award of the fellowships, scholarships, exhibitions, medals and prizes;
- e. the conditions and mode of appointment and duties of examining bodies, examiners and moderators;
- f. the conduct of examinations:
- g. the maintenance of discipline among the students of the Institute; and
- any other matter which by this Act or the Statutes is to be or may be provided for by the Ordinances.

Section 34:

- 1. Save as otherwise provided in this section, Ordinances shall be made by the Senate.
- All Ordinances made by the Senate shall have effect from such date as it may direct, but every Ordinance so made shall be submitted, as soon as may be, to the Board and shall be considered by the Board at its next meeting.
- The Board shall have power by resolution to modify or cancel any such Ordinance and such Ordinance shall from the date of such resolution stand modified accordingly or cancelled, as the case may be.

INTRODUCTION

- 1. All Bachelor of Technology (B.Tech.) Programmes offer by IIIT Vadodara shall be governed by the B.Tech. Ordinance.
- 2. The provisions contained in these regulations will govern the terms and conditions for student registration, course assessment and modes of assessment, minimum requirements of academic performance and evaluation of performance leading to B.Tech. degrees.
- 3. The Institute shall offer B.Tech. program in following branches
 - a. Four-year B.Tech. in Computer Science and Engineering (CSE).
 - b. Four-year B.Tech. in Information Technology (IT).

The ordinance shall be applicable to other B.Tech. degree programmes offered in future also.

These ordinances are effective from the date they are approved and published by the Government of India. The ordinance deal only with the post-admission academic activities of the Degree Programs. Eligibility criteria for admission, admission procedures, etc. are outside the purview of these regulations.

BTR 1: ACADEMIC CALENDAR

- 1.1 Each academic session is divided into two semesters of approximately eighteen weeks duration (with at-least seventy working days for classes in each semester): An Autumn semester and a Winter semester.
- 1.2 In addition, there may be a semester during the summer break, called a summer semester.
- 1.3 The Senate approved schedule of academic activities for a session, inclusive of dates for registration, mid-semester and end-semester examinations, inter-semester breaks etc, shall be laid down in the Academic Calendar for the session.

BTR 2: ADMISSION

- 2.1 The number of seats in each branch of the undergraduate programme for which admission is to be made at the IIIT Vadodara will be decided by the Senate of IIIT Vadodara. Seats are reserved for candidates belonging to Other Backward Classes (OBC), Scheduled Castes (SC), Scheduled Tribes (ST), and physically challenged (PC) candidates as per the decisions of Government of India from time to time.
- 2.2 Admission to the B.Tech. programme in any year will be as per orders from the Government of India. Currently these are based on performance in the Joint Entrance Examination (JEE) Main and HSC examinations as per Central Board of Secondary Education (CBSE) guidelines through a counselling conducted by the CSAB for the respective year.
- 2.3 Every student, admitted provisionally or otherwise to any Programme of the Institute, shall submit copies of the qualifying degree/provisional certificate and such other documents as prescribed by the Senate. These documents must be submitted by the prescribed date. The admission, provisional or otherwise, of any student who either does not submit the required documents by the stipulated date or fails to meet any other stipulated requirement for admission can be cancelled by the Institute.
- 2.4 The admission of any student may also be cancelled by the Senate, at any later time, if it is found that the student had supplied some false information or suppressed some relevant information while seeking admission.
- 2.5 The Institute reserves the right to cancel the admission of any student and ask him/her to discontinue his/her studies at any stage of his/her career on the grounds of unsatisfactory academic performance or on disciplinary grounds.

BTR 3: ATTENDANCE AND LEAVE OF ABSENCE

- 3.1 (a) Students are required to attend all the classes (Lectures, Tutorials, Laboratories, Practical, Workshops etc) for which they have been registered.
- (b) Students will have to attend all classes. A student may be debarred from appearing in an end semester examination if his/her attendance falls below 75 percent and will then be awarded an "F" grade in that course.

Leave Of Absence

- 3.2 (a) Students are not expected to be away from the Institute during a semester.
- (b) Students may be granted leave of absence on situations like death in the immediate family circle. Such leave will in no case exceed one week.
- (c) Absence due to illness not exceeding three weeks will be allowed after taking due permission. Due to emergencies, such permission may be taken later, and by the guardian if necessary.
- (d) If the period of absence in a semester exceeds three weeks, the student will have to drop the semester by dropping all courses he /she has registered for. The Senate may allow longer absences only in special circumstances and only after ascertaining the student's ability to make up for the lost time.
- (e) The leave of absence as per Clauses 3.2 (a) to 3.2 (d) will not be condoned for attendance.
- 3.3 It will be the responsibility of the student to intimate the Warden of the hostel in which he/she is residing, and the concerned instructors regarding his/her absence before proceeding on leave.

BTR 4: CONDUCT AND DISCIPLINE

- 4.1 Students shall conduct themselves within and outside the precincts of the Institute in a manner befitting the students of an institution of national importance.
- 4.2 For all issues related to student discipline, the general guidelines are prescribed in the Manual of Student Discipline.

BTR 5: CHANGE OF BRANCH

- 5.1 Normally a student admitted to a particular branch of the undergraduate programme will continue studying in that branch till graduation.
- 5.2 In special cases the Institute may permit a student to change branch from one branch of studies to another after the second semester. Such changes will be permitted, in accordance with the provisions laid down hereinafter.
- 5.3 Only those students will be considered eligible for change of branch/programme after the second semester, who have completed and passed all the common credits required in the first two semesters of their studies in their first attempt.
- 5.4 Applications for a change of branch/programme must be made by intending eligible students in the prescribed form. The academic section will call for applications at the end of second semester of each academic year and the completed forms must be submitted by the last date specified in the notification.
- 5.5 Students may enlist their choices of branch/programme, in order of preference, to which they wish to change over. It will not be permissible to alter the choices after the application has been submitted.
- 5.6 Change of branch/programme shall be made strictly in order of merit of the applicants. For this purpose the CPI obtained at the end of the second semester shall be considered. In case of a tie, the JEE rank of the applicants will be considered.
- 5.7 The applicants may be allowed a change in branch, strictly in order of merit, subject to the limitation that the strength of a branch should not fall below the existing strength by more than ten percent and should not go above the sanctioned strength by more than ten percent.
- 5.8 All changes of branch made in accordance with the above rules will be effective from the third semester of the applicants concerned. No change of branch/programme shall be permitted after this.
- 5.9 All changes of branch will be final and binding on the applicants. Once considered for change in branch, no student will be permitted, under any circumstances, to refuse the change of branch offered.

BTR 6 COURSE STRUCTURE

Education at the Institute is organized around the semester-based credit system of study. A student is allowed to attend classes in a course and earn credit for it, only if he/she has registered for that course. Prominent features of the credit system are a process of continuous evaluation of a student's performance/progress and flexibility to allow a student to progress at an optimum pace suited to his/her ability or convenience, subject to fulfilling minimum requirements for continuation and within maximum allowable period for completion of a degree. A student's performance/progress is measured by the number of credits that he/she has earned, i.e. completed satisfactorily. Based on the course credits and grades obtained by the student, grade point is calculated. A minimum grade point is required to be maintained for satisfactory progress and continuation in the programme. Also a minimum number of earned credits and a minimum grade point should be acquired in order to qualify for the degree.

6.1 Teaching of the courses shall be reckoned in credits; Credits are assigned to the courses based on the following general pattern:

1 hour Lecture (L) per week	1 Credit
1 hour Tutorial (T) per week	1 Credit
2 hours Laboratory (L) per week	1 Credit
3 hours Laboratory (L) per week	2 Credits

- 6.2 In order to qualify for a B. Tech. degree of the Institute, a student is required to complete the credit requirement as prescribed in the curriculum for a particular programme.
- 6.3 Every B. Tech. Programme will have a curriculum and syllabi for the courses approved by the Senate.
- 6.4 Medium of instruction, examination and project reports will be in English.
- 6.5 Faculty advisor will help the students in planning their courses of study and getting general advice on the academic programme, the concerned department will assign a Faculty Advisor to each student.

BTR 7 REGISTRATION

At the beginning of each semester, until the completion of the program, a student must register for the semester and for the courses that he/she will study during the semester.

BTR 7.1 Procedure for Registration

The registration schedule is announced in advance, and registration is normally carried out within the first two days of each semester through the prescribed procedure by the Academic Section. Late registration may be permitted for valid reasons on submission of an application to the Registrar, and only on payment of the prescribed late registration fee. In any case, registration must be completed before the prescribed last date for late registration in the Academic Calendar. Students having any outstanding dues to the Institute or hostel will not be permitted to register.

BTR 7.2 Eligibility for Course Registration

A student with no backlog courses (i.e. who has passed all the previous courses) will be eligible to register for all courses prescribed in the curriculum for semester. A student who has backlog course(s) or is on academic probation (BTR 14.1) (may be recommended a different set of courses, by the Dean of Academic Programs).

BTR 7.3 Pre-Requisite Courses

A student registering for a course must have successfully completed the Prerequisite course(s), if any, for that particular course. For hard Prerequisite, a minimum grade of DD is required.

BTR 7.4 Withdrawal from Semester and Discontinued for Failing to Register

- a. A student who wishes to withdraw prior to registration for a semester must obtain a formal approval from the Dean (Academic Programs) before the prescribed last date for late registration for the concerned semester. Withdrawal after registration for a semester is permitted only on medical grounds or for other exceptional reasons and formal approval for such withdrawal must be obtained from the Dean (Academic Programs) before the date of commencement of the end-semester examination for the concerned semester. Withdrawal from a semester, either prior to registration or after registration is permitted for only one semester at a time. If a student does not register for a regular semester or does not withdraw with permission from the Dean (Academic Programs) as indicated above, he/she will be discontinued from the Institute.
- b. A student who registers for a semester after having withdrawn in the previous semester(s) can register for the available courses as prescribed in the curriculum for that particular semester subject to the pre-requisites, if any.

c. The transcript of a student who has "withdrawn" status would show the appropriate status for the concerned semester(s). The transcript of a student who is suspended for an academic or disciplinary reason would also show "withdrawn" status.

BTR 8 AUDITING OF COURSES

BTR 8.1 Registration of Courses for AUDIT

Auditing of courses allows students to gain exposure to additional subjects without increasing unduly their overall workload. Registration of courses for AUDIT is permitted from fifth semester onwards under the following conditions:

- a. A student can audit a maximum of two courses during the entire program.
- b. A student has to enter the courses to be audited in the Course Registration Form while registering for the semester. The word "Audit" would be specially mentioned in the remarks column of the student's course registration form.
- c. A student can register a course for audit provided the following two conditions are satisfied:
 - i. the course instructor permits and approves the registration, and
 - ii. the lecture, lab and tutorial time-table strictly permit.
- d. An audit course will not be considered as an overload.
- e. If the student's performance is satisfactory, a grade of P (Pass) would be awarded. If the performance is not satisfactory, a grade of F (Fail) would be awarded.
- f. An audit course will not be considered for the calculation of Semester Performance Index (SPI)/Cumulative Performance Index (CPI). However, the course will be reflected in the Semester Grade Report and Transcript as an Audit Course provided a grade of P was obtained, otherwise the course will not appear in the Semester Grade Report and Transcript.

BTR 9.1 Regular Semesters

A student is permitted to register for additional courses over the prescribed courses in the curriculum for a regular semester provided the total number of courses does not exceed 7 and the total credits do not exceed 26. A student is permitted to under-load his/her prescribed academic load in a regular semester by dropping one or more courses provided the number of courses is at least 4 and the registered credits are not less than 12. However, after completion of his/her seventh regular semester, a student will be permitted to register for less than four courses.

BTR 10 COURSE ASSESSMENT AND MODES OF ASSESSMENT

BTR 10.1 Course Assessment

The assessment of students' academic performance include in-semester and end-semester examinations along with other continuous evaluation components. The various components of continuous assessment in a course may include home assignments, tutorial assignments, group assignments, quizzes, tests (open or closed book), viva-voce, mini projects, etc.

Attendance in lectures/labs/tutorials may also be given due weightage in course assessment. The instructor may make attendance in lectures/tutorials/labs compulsory (80% or less) and after consulting the Dean (Academic Programs), award 'F' grade to students who do not achieve the prescribed level of attendance in that course.

The distribution of weightage, for the assessment of academic performance of students, through various modes listed above will be communicated by the course instructor at the beginning of the semester after taking due approval from the director.

Note: Academic requirements such as projects and summer assignments, which are prescribed in the curriculum, are regarded as courses for the purpose of assessment.

BTR 10.2 Grading

a. For every course taken by a student, he/ she is awarded a letter grade based on his/ her combined performance in all the assessments. These letter grades are assigned points on a 10-point scale as described in the table below

Letter Grade	Corresponding Points	Explanation
AA	10	Outstanding
AB	9	Excellent
BB	8	
BC	7	
CC	6	
CD	5	
DD	4	
F	0	Fail
I	-	Incomplete
P	-	Passed

- b. A student passes the course if he/she gets any grade in the range of AA to DD, but fails if he/she gets the grade F. Certain courses are indicated as Pass/Fail courses, and in these courses a grade of P or F is awarded. F grade may also be awarded in case of malpractice in examination/continuous evaluation process. Pass/Fail courses are not considered for calculation of SPI/CPI.
- c. "I" grade will be awarded in a course if the overall performance of the student is satisfactory in the course, but the student either misses the end-semester examination due to illness, accident/death in the family or obtains such an approval from the Dean (Academic Programs) under exceptional circumstances. A student who misses the end-semester examination must apply and his/her application must be supported (i) by proper medical certificate duly approved by the Medical Authority of the Institute in the case of illness, or (ii) by adequate evidence in the event of death in the family. An application not so supported will not be considered. Grade "I" awarded for missing the end-semester examination will be converted into a performance grade (depending on the overall performance of the student in the course) after taking an examination equivalent to the end-semester examination of thatparticular course. An "I" grade must be converted into a performance grade by the specified date in the academic calendar for the next semester, otherwise it will be converted into "F" grade.

BTR 11 REPEATING A COURSE

16

BTR 11.1 Backlog Course

A student must repeat a course in which he/she has obtained an F grade in a course taken for credit. Such a course is regarded as a backlog course and is subject to the regulations for registration. A backlog elective course can be replaced by another elective of the same category.

BTR 11.2 Grade Improvement

A student whose CPI is less than 5.0 is allowed to repeat a course in which a DD grade was obtained for the purpose of grade improvement in a regular semester only. The grade obtained in the repeated attempt(s) will be considered for the purpose of calculating the CPI for the semesters thereafter. However, the grade obtained in the first and subsequent attempt(s) will be shown in the Transcript.

BTR 12 B.TECH. PROJECT

Indian Institute of	f Information	Technology	Vadodara

12.1 All stu	dents are r	equired to	complete	the B.Tech.	Project	(BTP).	The tota	ıl number	of credit	s will be
as normally	prescribed	in the cu	rriculum fr	om time to t	ime.					

12.2 The BTP	evaluation	guidelines	approved	by senate	shall be	commu	nicated	to the	students	at th	e time
of registration	L										

BTR 13 PERFORMANCE INDICES

BTR 13.1 Semester Performance Index (SPI)

The performance of a student in a semester is indicated by the Semester Performance Index (SPI). The SPI is the weighted average of the grade points obtained in all the courses registered by the student during the semester, calculated to two decimal places.

BTR 13.2 Cumulative Performance Index (CPI)

An up-to-date assessment of the overall performance of a student from the time of entering the Institute is obtained by calculating the student's Cumulative Performance Index (CPI). The CPI is weighted average of the grade points obtained in all the courses registered for credit by the student after entering the Institute. The CPI is also calculated to two decimal places.

BTR 13.3 Calculating SPI and CPI

The SPI is an indicator of the overall academic performance of a student in all the courses he/she has registered during a given semester. It is computed as follows:

If the grades (numeric values as per BTR 10.2) awarded to student are G_1 , G_2 ,... etc. in courses with corresponding credit units U_1 , U_2 ,... etc., the SPI is given by

$$SPI = (U_1G_1 + U_2G_2 +) / (U_1 + U_2 +)$$

In the above computation, courses with P grades are ignored. Similarly, the CPI indicates the cumulative academic performance in all the courses taken including those taken in the current semester as

BTR 14 MINIMUM REQUIREMENTS OF ACADEMIC PERFORMANCE

BTR 14.1 Academic Probation

A student will be placed on Academic Probation for his/her second semester with written intimation if his/her SPI at the end of first semester is less than 4.5. In subsequent semesters, a student will be placed on Academic Probation with written intimation if his/her CPI in the previous semester is less than 5.0 or if his/her SPI is less than 4.5 in the previous semester.

For every student placed on Academic Probation, the Dean (Academic Programs) will prescribe a minimum SPI the student must attain in the semester. The minimum SPI so stipulated will be arrived at on the basis of the performance of the student in terms of her/his SPI/CPI as compared to the minimum requirements for graduation.

BTR 14.2 Discontinued from the Institute on Account of Poor Academic Performance

If the performance of a student is poor so that he/she is not likely to benefit from continuing in the program any further, he/she would be required to leave the Institute. For this purpose an assessment of the student's academic performance will initially be made at the end of the second semester of his/her stay at the Institute and thereafter at the end of every subsequent semester. This assessment will be based on the CPI and SPI obtained by the student.

BTR 14.3 Discontinued from the Institute on account of Poor Academic Performance at the end of the Second and Fourth Semester

A student whose CPI is less than 4.0 at the end of second or fourth semester shall be discontinued from the Institute. However, such a student may be allowed to register for the available backlog courses offered in the summer semester, following his/her second or fourth semester. Such a student is permitted to register for a maximum of three of the available summer courses in which he/she is having F or DD grade. In case the student achieves the minimum CPI of 4.0 at the end of the relevant summer semester, he/she should be allowed to re-enter the program.

BTR 14.4 Minimum and Maximum Period for Completion of B.Tech. Program:

The minimum period to complete the program is four academic years. In any case, a student should fulfill the requirements for her/his degree within a maximum period of six academic years, failing which she/he will be required to leave the Institute. The period of six years excludes any semester in which the student has "withdrawn" status.

BTR 15 AWARD OF DEGREE AND MEDALS

BTR 15.1 The B.Tech. (CS) and B.Tech. (IT) Degree will be conferred on a student after he/she has fulfilled the graduation requirements stipulated in the curriculum (as approved by the senate).

BTR 15.2 Final CPI and Class:

For the purposes of computing the CPI at the end of the program, the student's CPI will be computed on the basis of the best CPI obtainable from the courses taken. The grade of B Tech Project (if graded as prescribed in the curriculum) should be included while computing the final CPI of the student.

The Transcript will indicate Distinction if the student obtains a CPI of 9.0 or above and First Class if the student obtains a CPI of 6.5 or above but less than 9.0.

BTR 15.3 Certificate of Academic Accomplishment:

A student who is unable to complete the degree requirements within the stipulated maximum period would be eligible to receive a "Certificate of Academic Accomplishment" by applying for it. The eligibility criteria and procedure for issue of the Certificate would be as laid down by the Institute senate from time to time.

BTR 15.4 Award of Medals

The Chairperson's Gold Medal shall be awarded to graduate(s) meeting the following criteria The graduate should have

- 1. the highest CPI in the admission batch (across departments/ branches)
- 2. minimum CPI of 9
- 3. not been put on academic probation during the academic program duration
- 4. not been put on disciplinary probation during the academic program duration
- 5. no fail 'F' grade in the transcript.

In case of more than one candidates qualify for the award, all candidates will be awarded the medals.

The institute medals

- The Institute Gold Medals will be awarded to students who have secured first places in their respective programs.
- 2. The Institute silver medal will be awarded to the second place holders for each program

BTR 16 GLOSSARY

Backlog Course: A course prescribed in the curriculum which has either not been registered or failed by a student.

Course Credit: Weighted sum of number of Lecture hours (L), Tutorial hours (T) and Practical hours (P) associated with the course. The weight for L and T is 1.0, and the weight for P is 0.5.

Grade Points: Product of the credits and points of a letter grade awarded to the course.

Semester: An academic year consists of two regular semesters of approximately 16 weeks duration each, the first (Autumn Semester) extending from July to December and the second (Winter Semester) from January to May. The summer semester is not a regular but a special semester of approximately eight weeks usually between May and July.

Semester Grade Report: Official record of the grades obtained in all the courses registered by a student in a semester.

Transcript: Official record of the grades obtained in all the courses registered by a student and is issued after the completion of the degree requirements.