



ACADEMIC REQUIREMENT FOR B TECH (ICT) PROGRAM

(Effective from Aut 2008-09 for 2008 batch and onwards)

This document contains rules governing the B Tech (Bachelor of Technology) program of DA-IICT, which is a four-year undergraduate program. The Institute is currently offering the degree of Bachelor of Technology (Information and Communication Technology) – B Tech (ICT). These rules are applicable to students admitted to the program in the academic year 2008-09 and onwards.

These rules deal only with the post-admission academic activities of the program. Eligibility criteria for admission, admission procedures, etc. are outside the purview of this document. They are subject to amendments from time to time as per the needs and requirements.

Dean (Academic Programs)/Registrar may, from time to time, issue such instructions or directions as may be necessary to give effect to and carry out the provisions of these rules. Director, as chairman of the Academic Council, may relax/exempt provision(s) of the rules in exceptional situations and all such cases shall be reported to the Academic Council in the immediate next meeting.

Important terms/expressions used in the document have been defined in the GLOSSARY at the end of this document.

1. REGISTRATION

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

1.1 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 (Student Registration System or SRS). Late registration may be permitted for valid reasons on submission of an application to the Deputy 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.

1.2 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 that semester, inclusive of the specified number of electives. A student who has backlog course(s) or is on probation may be recommended a different set of courses, by the convenor of the UG Committee.

1.3 Pre-Requisite Courses:

A student registering for a course must have successfully completed the Pre-requisite course(s), if any, for that particular course. For Hard Pre-requisite, a minimum grade of DD is required; for a Soft Pre-requisite, minimum grade of DE is required (see Section 4.2 below).

1.4 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.

2. AUDITING OF COURSES AND REGISTRATION FOR PG COURSES

2.1 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-tables 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 purposes of 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.

2.2 Registration for Post-Graduate level Courses for Credit:

Students with a CPI of 7.4 or above may be permitted to register for available M Tech level courses as credit courses from seventh semester onwards.

Such courses would be regarded as a part of the prescribed course load for the regular semester. A student can register a Postgraduate level course provided the following two conditions are satisfied:

- (i) the course instructor permits and approves the registration, and
- (ii) the lecture, lab and tutorial time-tables strictly permit.

3. COURSE LOAD

3.1 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 6 and the total credits do not exceed 26. A student is permitted to underload 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.

3.2 Summer Semester:

The summer semester is a special semester of approximately eight weeks between May and July. In a Summer Semester, a student can register for a maximum of three backlog courses. For the purpose of this rule, internship would be regarded as two courses and B Tech Project Part II would be regarded as three courses. However, no other course can be taken along with industrial/rural internship. For Summer Semester only, the term “backlog courses” indicates a course which a student has registered and failed. However, for a student who has completed eight regular semesters, the term “backlog course” would have the standard interpretation as given in the Glossary. Furthermore, students who have completed eight regular semesters are also permitted to register for grade improvement in Summer Semester.

4. COURSE ASSESSMENT AND MODES OF ASSESSMENT

4.1 Course Assessment:

The various modes of assessment used for rating students’ performance in a course include home assignments, tutorial assignments, laboratory work, group assignments, quizzes, tests (open or closed book), viva-voce, mini projects, etc. and the end-semester examination. 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 award “F” grade to students who do not achieve the prescribed level of attendance in that course. The distribution of weightage for the assessment (continuous evaluation) through the various modes listed above will be as indicated by the course instructor at the beginning of the semester.

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

4.2 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 | |
| AB | 9 | |
| BB | 8 | |
| BC | 7 | |
| CC | 6 | |
| CD | 5 | |
| DD | 4 | |
| DE | 3 | Pass |
| 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 DE, 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 to the Convener of Undergraduate Committee 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 that particular 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.

5. REPEATING A COURSE

5.1 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 as indicated in Paragraph 3. A backlog elective course can be replaced by another elective of the same category (technical/open/ science).

5.2 Grade Improvement:

A student whose CPI is less than 5.0 is allowed to repeat a course in which a DD or DE grade was obtained for the purpose of grade improvement in a regular semester only. The grade obtained in the repeated attempt will be considered for the purpose of calculating the CPI. The grade obtained in the first attempt will be shown in the Transcript, but will not be considered for calculating the CPI.

6. B TECH PROJECT

All students are required to complete the B Tech Project (BTP). The total number of credits will be as normally prescribed in the curriculum from time to time.

7. PERFORMANCE INDICES

7.1 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.

7.2 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.

8. MINIMUM REQUIREMENTS OF ACADEMIC PERFORMANCE

8.1 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.

8.2 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.

8.3 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 DE 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.

8.4 Discontinued from the Institute on account of Poor Academic Performance at the end of the Fifth or Subsequent Semesters:

A student who is placed on academic probation for a particular semester and fails to achieve the minimum SPI prescribed for him/her in that semester would be liable to be discontinued from the Institute.

8.5 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 includes any semester in which the student has “withdrawn” status.

9. AWARD OF DEGREE

9.1 The B Tech (ICT) Degree will be conferred on a student after he/she has fulfilled the following requirements:

- a. The student should have taken for credit and passed all the foundation and elective courses prescribed in the curriculum for the program. The minimum total number of course credits is 143, of which 102 correspond to foundation courses; the remaining credits must be obtained through elective courses, which may be group electives (minimum two courses), technical electives (minimum four courses), science electives (minimum two courses) or open electives (minimum one course). The minimum number of grade points required from course work for graduation is 715 (143×5.0). For this requirement, Pass/Fail courses, internships and B Tech Project are not considered. In case the student has earned the minimum number of credits, but does not have the minimum number of grade points, then he/she must take additional elective courses (up to the maximum specified for each category) in order to fulfil the requirement.
- b. The student should have passed all the foundation Pass/Fail courses prescribed in the curriculum, including all prescribed internships.
- c. The student should have obtained a passing grade for the B Tech Project, as prescribed in the curriculum.
- d. The student should have registered for at least eight regular semesters (i.e. excluding summer semester) as a regular student and should have paid all the institute dues.
- e. The student should have no case of indiscipline pending against him/her.

9.2 Final CPI and Class:

- a) 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 subject to:
- ❖ The total credits from course work will be taken from the least number of courses which are required to obtain 715 grade points; provided that these total credits must be at least 143, and must include 102 credits from foundation courses and must satisfy the minimum requirements for different categories of electives, as indicated in paragraph 9.1 (a) above.
 - ❖ All other courses taken by the student will be categorized as extra credits and not considered for calculating the final CPI.
 - ❖ The CPI would be computed inclusive of the grade points earned from course work, as described in 9.2 (a)(i) and from the B Tech Project.
 - ❖ The requirement of earned course credits and grade points is subject to change, with the Director's approval, in case credit structure of a course is modified.
- b) 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.

9.3 Certificate of Academic Accomplishment:

A student who is unable to complete the degree requirements within the stipulated maximum period (see Clause 8.5 above) 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 from time to time.

10. 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.

Under-Graduate Committee (UG Committee): Committee of the Institute responsible for Policy Guidelines & Implementation Strategies covering the Undergraduate Program.

DA-IICT, Gandhinagar

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amended on December 29, 2011