

National Institute of Electronics and Information Technology(NIELIT)
(Institution Deemed to be University under Distinct category)

Birla Farms, Bada Phull, Ropar-140001

REGULATIONS FOR

Bachelor of Computer Applications

(Effective from the Session: 2024-2025)

APPROVED BY

The Executive Committee in its meeting held on _____

***** Campuses *****

North	North-East	West	South
Gorakhpur	Agartala	Ajmer	Calicut
Patna	Aizawl	Aurangabad	
Ropar	Imphal		
Srinagar	Itanagar		
	Kohima		

NIELIT Deemed to be University

****REGULATIONS – 2024-25****

Regulations relating to the Admission to Course of Study, Conduct and Evaluation of the Examination for undergraduate Programme leading to Batchelor of Computer Application (BCA) Degree.

1. Short Title and Commencement

1.1. These Regulations shall be called NIELIT Deemed to be University Regulations 2024-25

1.2. These Regulations shall be effective from the academic year 2024-25.

2. Definitions

In the following, unless the context otherwise requires,

- i. “Academic Programme” shall mean a programme of courses or any other component leading to a BCA degree, as approved by the Board of Management from time to time.
- ii. “Academic Year” shall mean a period of nearly twelve months devoted to completion of requirements specified in the scheme of courses and the related examinations.
- iii. “Candidate” shall mean an individual who applies for admission to BCA programme of the University.
- iv. “BoM” shall mean the Board of Management of the University.
- v. “BoS” shall mean the Board of Studies of the concerned Department.
- vi. “Branch” shall mean the branch of knowledge studied by a student.
- vii. “CBCS” shall mean the Choice Based Credit System.
- viii. “CCC” shall mean Course Co-ordination Committee.
- ix. “CGPA” shall mean the Cumulative Grade Point Average.
- x. “CoE” shall mean the Controller of Examinations of the University.
- xi. “Course” shall mean a curriculum component of the academic programme identified by a designated code number, a title and specific credits assigned to it.
- xii. “Degree” shall mean the BCA degree.
- xiii. “Department” shall mean Department established in the University for running the academic and research activities in a specified discipline.
- xiv. “Discipline” shall mean the branch of knowledge studied by a student.
- xv. “DUGC” shall mean the Department Under Graduate Committee.
- xvi. “ESE” shall mean the final regular End-Semester Examination.
- xvii. “EWS” shall mean the Economically Weaker Sections of the society.
- xviii. “Examiner” shall mean the instructor teaching a specified course who has been nominated as examiner.
- xix. “HoD” shall mean the Head of Department.
- xx. “MSE” shall mean the Mid-Semester Examination.
- xxi. “BCA” shall mean Batchelor of Computer Application.

- xxii. “Paper Setter” shall mean the faculty member responsible for setting a question paper.
- xxiii. “PD” shall mean differently abled persons as specified by the Government of India from time to time.
- xxiv. “UG” shall mean Under-Graduate.
- xxv. “PIO” shall mean Person of Indian Origin.
- xxvi. “Registration” shall mean registration for a specific course or semester, at the start of the semester, of any programme of the University.
- xxvii. “SC/ST” shall mean the Scheduled Castes/Scheduled Tribes as notified by the Government of India/Government of NCT of Delhi, as applicable from time to time.
- xxviii. “Semester system” shall mean a programme wherein each academic year is apportioned into two semesters.
- xxix. “SGPA” shall mean the Semester Grade Point Average.
- xxx. “Student” shall mean a student registered for a under graduate programme for full-time study leading to the BCA Degree.
- xxxi. “University” shall mean the NIELIT Deemed to be University.
- Note:** ‘He’, ‘Him’ and ‘His’ implies ‘he/she’, ‘Him/Her’ and ‘his/her’, respectively. Words and expressions used but not defined in these Regulations and defined in the Act and Statutes, shall have the meanings respectively as assigned to them in the Act and Statutes.

3. Batchelor of Computer Application (BCA) Programmes

These Regulations shall be applicable to BCA programme conducted by the various Faculties of the NIELIT University and its constituents.

4. Qualification Eligibility

The minimum qualifications required for admission to the B.C.A. degree program (Regular) are as follows:

- A) A candidate must have completed their secondary education (10+2) from a recognized board or institution with mathematics as a mandatory subject.
- B) The candidate must meet the minimum percentage of marks or CGPA as prescribed by the University.
- C) In addition to the above criteria, actual admissions will also be governed by the rules and regulations of the UGC, AICTE, or other competent authorities.

Or

NIELIT ‘O’ Level

5. Category Wise Reservation

- i. Seats are reserved as per Govt. of India Rules, AICTE and/or University Approval.
- ii. A quota of 15% is reserved for the SC candidates, 7.5% for ST candidates, 27% for Other Backward Classes, 3% for PWD candidates and 10% for Economic Weaker Section (EWS):
- iii. Number of seats reserved are tentative and subjected to be change by Government orders given time to time

6. Age Criteria:

There is no minimum age requirement.

7. Entrance Test Scheme

One objective type OMR based written test comprising 100 MCQs of 2 hours' duration will be conducted. The pattern will be as under.

Part	Particular	Number of MCQs
A	Reasoning and Aptitude	100

8. Selection Process for Admission for 1st year BCA

- i. Only the Candidates meeting the minimum eligibility criteria will be eligible for admission.
- ii. The eligible candidates have to register online.
- iii. The application fees will be as applicable from time to time.
- iv. The seats will be filled on the basis of merit of entrance test conducted by NIELIT Deemed to be University.
- v. Admission of the Selected Candidates will be subject to their verification of Documents and payment of applicable fees.
- vi. The category-wise Main List (selected) and Waiting List of the candidates for admission to (year 2024-25) of BCA Course will be displayed on the website and Notice Board of the University only.
- vii. The waitlisted candidates, available at the time of counseling of the waiting list, shall be provisionally admitted as per the merit of the category-wise waiting list.

- viii. The candidates are required to produce all the originals certificates and fee at the time of counselling. No relaxation in time will be given for arranging the money or for bringing the original certificates from another place.
- ix. Admission process of the BCA Course is completed when the approved intake of candidates as per Seat Matrix are provisionally admitted and registered or a time limit decided by the competent authority is over, which- ever is earlier.

9. General Rules

- i. Qualifying entrance test does not entitle a candidate to get admission.
- ii. Once the candidate has submitted the information on the website, any change in the Form/information, including category once marked, shall not be allowed.
- iii. The fee for the Entrance Test once paid shall not be refunded / transferred / adjusted.
- iv. The candidates shall be required to hand over their Answer-Sheets and the Question Papers / Booklets in full to the Centre Superintendent even if they have not attempted any question. No page/part of the Question Paper/Answer Sheet is to be removed / torn/taken out of the Examination Centre under any circumstances, failing which the candidates shall be disqualified from the entire test.
- v. There shall be no negative marking.
- vi. There shall be no re-evaluation/re-checking/re-assessment of Answer-Sheets once result is declared.

10. Curriculum Structure

- i. UG programmers of the University shall be based upon CBCS and shall have well defined Programme Educational Objectives (PEOs).
- ii. All the courses shall have well defined Course Outcomes (COs).
- iii. UG programmes shall have a Semester-wise Course scheme with detailed syllabi and an evaluation scheme of the various courses duly approved by the BoM on the recommendations of the BoS of various Departments and the EC.
- iv. A course may be designed to comprise lectures, tutorials, laboratory work, field work, outreach activities, project work, vocational training, viva, seminars, term papers, assignments, presentations etc. or a combination of some of these components.
- v. Courses are of four kinds: Core, Generic/Interdisciplinary, Elective and Skill Enhancement.

10.1. **Core Course (C)**

This is a course which is to be compulsorily studied by a student as a core requirement to complete the requirements of UG. programme.

10.2. **Generic/Interdisciplinary(GI)**

Course generally from an unrelated discipline/subject, with an intention to seek exposure.

10.3. **Elective Course/Discipline Specific Elective (DSE)**

An elective course is a course which can be chosen from a pool of courses. It is intended to support the discipline of study by providing an expanded scope.

10.4. **Skill Enhancement Course (SE)**

These courses are designed to provide value-based and/or skill-based knowledge.

10.5. The requirements for the various types of courses i.e. C/GI/DSE/SE shall be given in the Semester-wise Course scheme for all programmes.

10.6. A course may have pre-requisite course(s) which shall be specified in the Semester-wise Course scheme.

10.7. Each course contributes certain credits to the programme. A course is conducted with 3 hours of lectures and either 1 hour of tutorial or 2 hours of practical work per week.

10.8. A dissertation/thesis/project is considered as a special course involving application of the knowledge gained during the course of study in exploring, analysing and solving complex problems in real life applications. The dissertation gives an opportunity to the student to express his/her creative talent and prepare for his/her future carrier. A candidate shall complete such a course with an advisory support by a University faculty member. It is mandatory to pass this course to become eligible for award of the degree.

10.9. The courses under GI and SE offered for students would be specified for BCA programmes in the above scheme.

10.10. The programme centric courses under C and DSE categories would be listed for BCA programme separately.

11. Programme Duration and Structure

11.1. An academic year shall be apportioned in two semesters, namely odd and even. Each semester shall consist of approximately eighteen weeks.

11.2. The duration of the full-time programme shall not be less than six semesters (three years) and the maximum span of the course shall be five years.

11.3. There shall be an academic calendar for each semester. The schedule of academic activities including the dates of registration, MSE and ESE shall be governed by Academic Calendar. The calendar may also specify dates during which the co-curricular and extra-curricular activities shall be organized.

- 11.4. A student has to register for the requisite number of courses before the start of a semester as per the schedule given in the academic calendar and guidelines issued by the office of the Dean, Academics from time to time.
- 11.5. The University may cancel the registration of all the courses in a given semester if
 - a. The student has not cleared the dues to the institution/hostel.
 - b. A punishment is awarded leading to cancellation of the student's registration.
- 11.6. A student can opt for a course only if he/she has successfully passed its pre-requisite(s) wherever applicable/specified.
- 11.7. The programme shall consist of 121 credits. A student shall be awarded the degree if he/she has earned 121 credits. CGPA shall be calculated on the basis of these 121 credits.

12. Assessment

- i. The overall performance of a student is evaluated by assigning equal weightage to all the six semesters in order to maintain the quality of education.
- ii. A student is permitted to appear for the semester examination subject to he or she has a minimum attendance in theory and practical classes as mentioned in this document, completes all his/her sessional assignments and clears all his/her dues.
- iii. Non-appearance in any examination is treated as the student having secured zero mark in that subject examination.
- iv. The evaluation is based on an average weightage system. Every subject has credit points based on the hours of study required.
- v. Every student is assessed in a subject with equal weightage to sessional work and semester examination, thereby making the students study regularly.
- vi. Every student is awarded Grade points out of maximum 10 points in each subject. (Based on 10 Points Scale).
- vii. Based on the Grade points obtained in each subject, Semester Grade Point Average (SGPA) and then Cumulative Grade Point Average (CGPA) are computed as per ANNEXURE-I.

13. Evaluation and Assessment

- i. Performance of a student in a semester shall be evaluated through continuous class assessment, MSE and ESE. Both the MSE and ESE shall be the University examination and will be conducted as notified by the CoE of the University.
- ii. The marks for continuous assessment (Sessional marks) shall be awarded at the

end of the semester.

- iii. The continuous assessment shall be based on class tests, assignments/tutorials, quizzes/viva-voce and attendance.
- iv. The MSE/ESE shall be comprising of written papers, practical and viva-voce, inspection of certified course work in classes and laboratories, project work, dissertation, design reports or by means of any combination of these methods.
- v. The weightage of each of these modes of evaluation for the different types of courses are as in Table 1.
- vi. Further, the mechanism for continuous assessment will be as in Table 2.

Table 1: Evaluation Scheme

Sr. NO.	Type of Course	Continuous Assessment (CA)- Theory	MSE Theory	ESE Theory	Continuous Assessment (CA)- Practical	ESE Practical
i.	SE Courses	Continuous Assessment (100 Marks)				
ii.	C/GI/DSE Theory with Tutorial	25	25	50	Nil	Nil
iii.	C/GI/DSE Theory with Practical	10	15	50	10	15
iv.	OJT Project/ Internship	Nil	Nil	Nil	40	60

Table 2: Continuous Assessment

Sr. NO.	Type of Course	Continuous Assessment (CA)- Theory
i.	C/GI/DSE Theory with Tutorial	Two class tests, Assignments, Teachers' assessment (paper presentation, quizzes, viva-voce, attendance)
ii.	C/GI/DSE Theory with Practical	One class test, One Lab test, Assignments/Projects, Teachers' assessment (paper presentation, quizzes, viva-voce, attendance)

iii.	OJT Project/ Internship	Mid-Semester Presentation, Report, Supervisor's Assessment
iv.	SE Courses	Two class tests, Assignments, Teachers' assessment

14. Grading

14.1. The relative grading system shall be implemented in awarding the grades and SGPA/CGPA under the CBCS (Choice Based Credit System). A 10-point grading system shall be used with the letter grades as given in Table 3.

Table 3: Grading

Sr. No.	Letter Grade	Letter Grade Description	Grade Point
1.	O	Outstanding	10
2.	A+	Excellent	9
3.	A	Very Good	8
4.	B+	Good	7
5.	B	Above Average	6
6.	C	Average	5
7.	D	Pass	4
8.	F	Fail	0
9.	FD	Fail due to detention	0
10.	AB	Absent	0
11.	W	Withdrawal	Nil
12.	I	Incomplete	NIL

14.2. The award of the grades shall be based on the marks out of 100, as per the distribution of the various components given in Table 1.

14.3. The grades shall be allotted on the basis of normalized score as described below and Table 4.

Table 4: Grading

Sr. No.	Marks	Grade	Marks
1.	≥ 90	O	≤ 100
2.	≥ 81	A+	< 90
3.	≥ 72	A	< 81
4.	≥ 63	B+	< 72
5.	≥ 54	B	< 63
6.	≥ 45	C	< 54
7.	≥ 35	D	< 45
8.		F	< 35

14.4. Interpretations of Grades

- a) **Fail grade:** A student obtaining Grade F/FD shall be considered as failed and shall be required to re-register for the course. In case of the elective courses, if the student does not want to re-register in an elective course in which he/she has failed (for GI, DSE courses but not for C course or SE courses), then he/she can re-register afresh for a new elective course. However, grades F/FD, as applicable, shall be mentioned in the Grade Card even after passing the course.
- b) **'FD' grade:** An 'FD' grade indicates fail due to the shortage in attendance.
- c) **'W' grade:** This refers to the withdrawal from the courses other than core courses. Withdrawal shall be allowed as per the guidelines issued by the Dean, Academics from time to time.
- d) **SE courses:** For SE courses, Grades shall be indicated however this will not be counted for the computation of the SGPA/CGPA.

14.5. Computation of SGPA and CGPA

- a) The SGPA is the ratio of the sum of the product of the number of credits and the grade points scored in all the courses taken in a semester (including back-log courses), to the sum of the number of credits of all the courses taken by a student, that is: $SGPA(S_j) = \frac{\sum(C_i \times G_i)}{\sum C_i}$ where, S_j is the semester, C_i is the number of credits of the course of that semester and G_i is the grade point scored by the student in the course.
- b) The CGPA is also calculated in the same manner taking into account the best 68 credit courses of the student taken over all the semesters of a programme, that is: $CGPA = \frac{\sum(C_i \times G_i)}{\sum C_i}$ where, C_i is the number of credits of the course and G_i is the grade point scored by the student in the course.

- c) The SGPA and CGPA shall be rounded off to 2 decimal points.
- d) CGPA shall be converted into percentage of marks by multiplying it with 10.
- e) Both CGPA and percentage shall be mentioned on the final transcript.

15. Departmental Undergraduate Committee

Each department shall have a Department Under Graduate Committee (DUGC) consisting of a minimum two faculty members and a chairperson as nominated by the HoD. The DUGC shall have the following functions.

- a. To develop and maintain the procedure for allocation of OJT Project supervisor.
- b. To arrange MSE/ESE viva-voce for OJT Project.
- c. To monitor the regularity and progress of the students.
- d. To recommend students for award of University assistantship, if applicable.
- e. To lay guidelines for all matters related to OJT Project.

16. Supervision of OJT Project

- 16.1. Each student shall have to undertake OJT Project work independently.
- 16.2. The DUGC shall allocate supervisor(s) to students for OJT Project.
- 16.3. The University encourages OJT Project in collaboration with reputed industry, R&D organizations and other educational institutions. The supervisor may propose a co-supervisor from the collaborating institution/ R&D organizations to DUGC.

17. Evaluation of OJT Project

- 17.1. The ESE will be conducted by a panel of external/internal examiners as per the academic calendar and schedule notified by the department. The examination will be based on the OJT Project report, presentation and viva voce.

18. Attendance and Detention

- 18.1. Students of the programme are expected to attend every lecture, tutorial and practical class scheduled for them.
- 18.2. The students must have a minimum attendance of 75% of the total number of classes including lectures, tutorials and practicals, held in a subject till MSE/ESE in order to be eligible to appear in the MSE/ESE for that subject.
- 18.3. The Dean Academics, may allow relaxation in the minimum requirement of attendance up-to 10% for reasons to be recorded. This relaxation may be granted on the production of documents showing that the student was either busy in any authorized activities or was absent due to medical/other genuine reasons. The student should submit these documents to the HoD, within seven days of resuming the studies. Certificates submitted later will not be considered.

- 18.4. Under exceptional circumstances, the Dean Academics may further relax the minimum attendance up to 5% on recommendation of a committee comprising of Dean Student Welfare, Dean of Faculty and HoD of the respective department.
- 18.5. Relaxation in attendance maybe granted for a maximum of 2 times during the duration of the programme.
- 18.6. A student shall not be permitted to appear in the MSE/ESE if his/her attendance till MSE/ESE is below 60 % after relaxation.
- 18.7. Students who are not allowed to appear in the ESE due to shortage of attendance shall be awarded 'FD' grade. Such students shall have to register again for that course in subsequent years/summer semester to pass the course.
- 18.8. A student can register again for a different elective course in subsequent years /summer semester and pass the elective course.
- 18.9. The attendance shall be counted from the date of start of academic session. For first year students, attendance shall be counted from the date of the start of academic session or the actual date of admission, whichever is later.

19. Award of UG Degree

- 19.1. The Degree will be awarded by NIELIT Deemed to be University on completion of 3 years.
- 19.2. A student must complete the Degree in maximum period of five (5) years and must obtain a minimum CGPA of 4 in the course to qualify for award of Degree.
- 19.3. Further, an extension of one year may be granted at the discretion of the University to complete the Degree.

20. Promotion and Passing a Course

- 20.1. There shall not be any restriction on promotion from an odd semester to the next even semester.
- 20.2. For promotion from even semester to the next odd semester (i.e. of the next academic year) the student has to fully clear either of the semester of the academic year or earn credits greater than or equal to minimum credit of either of the semester of the academic year.
- 20.3. There shall be no supplementary examinations. A student who has failed in a course shall have to register again for the course in a subsequent year/summer semester.
- 20.4. If the student does not want to register again in an elective course (that is, GI, DSE, but not C or SE courses) then he/she can register again for a new elective course.
- 20.5. Summer semester may be run for back log courses in which there are 10 or more registrations. Separate grade card shall be issued for the summer semester (if applicable).
- 20.6. If a student wants to improve his/her grade in a course, he/she has to register again for the course. However, the student may register for a different elective course as per clause

- 20.7. Registration for improvement of grade in a course shall be allowed only once. However, the best grade in that particular course, shall be considered for computation of SGPA/CGPA.
- 20.8. To pass a course, the student should score at least 30% marks separately in the ESE of theory and practical (wherever applicable) components of the course.

21. Ex-studentship

- 21.1. A candidate opting for ex-studentship shall be required to appear in all the theory/practical/viva papers in the end semester examinations of both semesters/ annual examination of the same academic year. However, the sessional marks of theory & practical both shall remain the same as those secured earlier.

22. Withdrawal

- 22.1. Partial withdrawal in a semester shall not be allowed.
- 22.2. A student may apply for withdrawal from the semester, if he/she so desires. However, in any case, the maximum span shall remain five years for full-time programme. However, the student shall have to pay the University fee as applicable during the period of the withdrawal.
- 22.3. Students who discontinue their study without taking a formal withdrawal shall be deemed to have abandoned the studies. The names of such students will be struck off from the rolls and no fees including caution money of the University will be refunded to them.
- 22.4. Students will not be entitled to any fellowship/assistantship after taking withdrawal from the programme.

23. Course Co-Ordination Committee

The Course Co-ordination Committee (CCC) shall comprise of all the teachers teaching a course. However, where less than three teachers are teaching the course, the HoD may nominate a three-member committee. The chairperson of the CCC shall be nominated by the HoD, before the beginning of the semester. The CCC shall have the following functions.

- i. To lay the guidelines for teaching and evaluating the courses including the design of practicals, well in advance of the starting of the semester.
 - a. To coordinate the preparation of quizzes, assignments, test papers etc. for continuous assessment.
 - b. Chairperson CCC shall set the MSE question paper.
 - c. Question Paper setters may be appointed from amongst the members of the CCC.
 - d. Examiners shall be appointed from amongst the members of the CCC.
 - e. A question paper moderation committee may be formed out of the members of CCC chaired by the Chairperson, CCC.
 - f. To consider the individual representation of the students about evaluation and take remedial action, if needed.

24. Result, Award of Degree and Medals

The results of all the University Examinations shall be declared by the CoE taking into consideration the following:

- a) BCA programme consists of 121 credits. A student shall be eligible for the award of the BCA degree if he/she has earned 121 credits.
- b) CGPA will be calculated on the basis of the 121 credits earned by the student.
- c) Degree of UG programme shall be awarded only after the sixth or final semester examination based on aggregate performance of the candidate.
- d) A student who qualifies for the award of the degree securing 'D' or above grades' in all the subjects in his / her first attempt in six consecutive semesters and secures a CGPA of 8.00 or above shall be awarded FIRST DIVISION WITH DISTINCTION.
- e) A student who qualifies for the award of the degree by securing 'D' or above grades' in all the subjects in the stipulated maximum duration for the BCA programme and secures a CGPA not less than 6.50 shall be awarded FIRST DIVISION.
- f) All other students who qualify for the award of degree by securing 'D or above grades' in all subjects in the stipulated maximum duration for the BCA programme and secures a CGPA between 5.0 and 6.49 shall be awarded SECOND DIVISION.
- g) All other students who qualify for the award of degree by securing 'D or above grades' in all subjects in the stipulated maximum duration for the BCA programme and secures a CGPA less than 5.0 shall be awarded THIRD DIVISION.
- h) The Gold, Silver and any other Medals as decided by the university shall be awarded to students, for each department, from amongst those students who have been awarded first division with distinction.
- i) Students who have developed/demonstrated exceptionally innovative ideas/projects/designs etc. would be eligible to be considered for appropriate awards as per University norms.

25. Unfair Means

Cases of having used unfair means in any examination shall be dealt as per such Rules and Regulations as may be proposed by the Examination Committee and approved by the EC and the BoM.

26. Leave Rules

26.1. Students who have been granted AICTE fellowship/University assistantship may be granted leave on submission of application to the concerned HoD. Applications must be submitted well in advance of the date of commencement of the leave requested. The following leaves are admissible during the programme of the study.

- i. Casual leave: 15 days in an academic year.
- ii. Medical leave: Maximum of one month (30 days) in an academic year
- iii. Maternity leave: As per the Govt of India instructions time to time.

26.2. The student shall have to maintain minimum attendance requirement as mentioned in this document, to appear in MSE/ESE.

27. Curriculum Revision

The curriculum shall be updated continuously as and when considered necessary, to keep pace with the advancements in the subject areas of the BCA degree(s).

28. Interpretation of The Regulations and Power to Modify

Subject to the provisions of the Act, the Statutes and the Regulations, the issues not covered in Regulations as above, or in the event of differences of the opinion/interpretation, the Vice-Chancellor may take a decision, after obtaining the opinion of the Advisory Committee. The decision of the Vice-Chancellor shall be final. However, this may not be taken as precedence for any similar cases in future. The Advisory Committee shall consist of the following

- a. Dean, Academics, Chairperson
- b. Deans of the Faculties
- c. Controller of Examinations
- d. Two Chairpersons of BoS, as nominated by the Vice Chancellor.