VEER MADHO SINGH BHANDARI UTTARAKHAND TECHNICAL UNIVERSITY

(Formerly Uttarakhand Technical University, Dehradun Established by Uttarakhand State Govt. wide Act no. 415 of 2005) Suddhowala, PO-Chandanwadi, Premnagar, Dehradun, Uttarakhand (Website- www.uktech.ac.in)





For

BACHELOR OF COMPUTER APPLICATION PROGRAMM

(BCA)

(For admission in 2024-25 and onwards)

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VEER MADHO SINGH BHANDARI UTTARAKHAND TECHNICAL UNIVERSITY Dehradun, Uttarakhand -248007, INDIA

Ordinance

for

BACHELOR OF COMPUTER APPLICATION PROGRAMME

(BCA)

(For admission in 2024-25 and onwards)

1. Admission

Admission to BCA 1stsemester will be made as per the rules prescribed by the Academic Council of the VMSB Uttarakhand Technical University, Dehradun.

2. Eligibility for Admissions:

2.1 Minimum eligibility for BCA admission shall be passing the 10+2 examination with a minimum of 45% marks (40% for reserved categories) in Intermediate, or as prescribed by the University from time to time. Candidates must have mathematics as a subject in class 10th. Candidates who do not have Mathematics as a subject in class 12th must complete a bridge course in Mathematics during the First semester. The purpose of this bridge course is to provide the mathematical foundation required for the BCA program.

2.2 **Implementation of Bridge Course:** The bridge course for Mathematics must be completed before the start of the academic session. Successful completion of Bridge course will be essential for the students who have not studied Mathematics in class 12, and they will be eligible appear in First Semester Examination only after passing this course for which examination shall be conducted by the University twice at interval of 20 days in the respective Institutes, failing which the admission of candidate will be considered cancelled. Passing marks for the bridge course is 30% in external examination and 40% on aggregate (Sessional+ESE). There will only one class test for internal evaluation of 20 marks. No grace marks will be provided in the bridge course. 2.3 The Academic Council shall have power to amend or repeal the eligibility criteria laid down at clause 2.1, as per the guidelines of AICTE/University.

3. Duration of the BCA Programme, Provision of Multiple Exit and Awarding Certificate, Diploma, and Degrees:

The maximum duration of programme will be as per regulations and recommendations of the statutory bodies governing the BCA programme as prescribed by the University. The total duration for completing the BCA programme from the date of admission in first year to completion of 3 years BCA degree (including Breaks) shall not exceed 6 years. The details of qualification to be awarded as Certificate / Diploma / Degree in line with the exit options, entry options, and it's credit requirements are given in Table1.

No of Years of	Qualification	n and qualification Exit Options	Credit	Entry Options
Completion	Awarded	Exit Options	Requirement	Entry Options
Completion One Year (I & II Semester)	Awarded Certificate in Computer Application (CCA)	Students have an option of exiting the programme after completion of first year (Semester I and II)	Requirement Students are required to complete minimum 45 credits including vocational course which is mandatory.	Students who exit with a Certificate in Computer Application (CCA) are permitted to re-enter within three years from the date when student took break and may complete the BCA programme
Two Years (I to IV Semester)	Diploma in Computer Application (DCA)	Students have an option of exiting the programme after completion of second year i.e. semesters I, II, III, and IV)	Students are required to complete minimum 90 credits.	Students who exit with a Diploma in Computer Application (DCA) are permitted to re-enter within three years from the date when student took break and may complete the BCA programme
Three Years (I to VI Semester)	Bachelor of Computer Application (BCA) Degree	After successful completion of all six semesters	Degree shall only be awarded if the student earns full 135credits in every semester	

- 4.1 The 3 year curriculum has been divided into 6 semesters. It shall include lectures, tutorials, practicals, seminars, project etc. as defined in the scheme of instructions and examination issued by the University from time to time.
- 4.2 The curriculum will also include such other curricular, co-curricular and extra-curricular activities as may be prescribed by the University, if AICTE guidelines are prescribed on the issue.
- 4.3 Curriculum Structure

The University follows a specialized credit based semester system. The programme will have a specific curriculum for all semesters (Semester 1 to Semester 6) with a syllabi consisting of Theory, Practical, Project work etc. as given below and shall be in accordance with the prescribed syllabus. The subjects shall be covered through lectures, Tutorials, laboratory classes, seminar, projects work etc. as prescribed by university

The curriculum structure comprises of broad segments as tabulated below.

Knowledge Segments	Credits	
Multidisciplinary Courses	9	
Professional core courses	98	
Ability Enhancement Courses (AEC)	3	
Skill Enhancement Courses (SEC)	3	
Value Added Courses (VA)	10	
Summer Internship (SI)/Seminar	3	
Major Project (PRJ)	9	
Total academic credits for BCA degree	135	

Audit Courses:

The status and marks allotted for the audit courses are tabulated as below. Every student

will have to qualify in the audit courses for becoming eligible to get the degree.

S. No	Audit course status	Marks obtained
1	Qualified (Q)	40% and above
2	Not Qualified (NQ)	Below 40 %, candidate has to repeat the course

5. Attendance:

- 5.1 Every student is required to attend all the lectures, tutorials, practicals and other prescribed curricular and co-curricular activities. The attendance can be condoned upto 25% on medical grounds or for other genuine reasons beyond the control of students.
- 5.2 A further relaxation of attendance up to 15% for a student can be given by Head of Institution/college provided that he/she has been absent with prior permission of the Head of the institution/college for there as on acceptable to him.
- 5.3 No student will be allowed to appear in the end semester examination if he/she does not satisfy the overall average attendance requirements of Clause Nos.5.1, and5.2 and such candidate shall be treated as having failed and further governed by clause no. 3.
- 5.4 The attendance shall be counted from the date of admission in the college or start of academic session whichever is later.

6. Examination:

- 6.1 The performance of a student in a semester shall be evaluated through continuous class assessment and end semester examination. The continuous assessment shall be based on class tests, assignments/tutorials, quizzes/viva voce and attendance. The marks for continuous assessment (Sessional marks) shall be awarded at the end of the semester. The end semester examination shall be conducted by means of written papers, practicals and/or viva- voce, inspection of certified course work in classes, project work, and design reports or by means of any combination of these methods.
- 6.2 The distribution of marks for sessional, end semester theory papers, practicals and other examinations, seminars and project etc. shall be as per the prescribed scheme of examination.
- 6.3 The marks obtained in a subject shall consist of marks allotted in end semester theory paper, practical examination and sessional work. The grade will be awarded based on the marks obtained as per clause 10. The "F" grade denotes the failure in passing respective subjects and student has to make another attempt to pass the subject as per provision of this ordinance.
- 6.4 The minimum pass marks in each subject having sessional marks componentshallbe40% (including sessional marks) with a minimum of 30% marks in the end semester examination of respective subject. If there is no provision of sessional marks in any subject, the minimum pass marks in that subject shall be 40% in the end semester examination.

7. Unfair means:

Cases of unfair means shall be dealt as per the rules of the University and the Government Public Examination (Prevention of Unfair means) Act if any in force.

8. Award of Sessional Marks:

Sessional Marks for theory subjects, practicals and projects shall be awarded as will be prescribed and at present the break-up of sessional marks shall be as follows:

(a)	Theory Subjects:	
(i)	Class Test (CT) which will comprise of	60%
	two mid-term tests of equal weightage	
(ii)	Teacher Assessment:	
	Tutorial/Assignment/Quizzes	20%
	Attendance	20%
(b) (i) (ii) (iii)	Practicals: Two mid-term viva-voce/tests of equal weightage Teacher Assessment of Lab Record Attendance	50% 25%
()		25%

(c) Make-up test may be held only for those students who could not appear in anyone of mid-term class tests due to genuine reasons for which the prior permission from the Head of Institution/Head of Department in the University campus was taken. Make up test shall ordinarily be held about two weeks before the semester examination.

The syllabus for the make-up test shall be the whole syllabus covered by the subject teacher up to that time and it will be of three hours duration.

9. Grace Marks:

A candidate may be awarded grace marks up to a maximum of total 10 marks, in maximum four subjects but not more than five marks in any subject including theory papers, practicals, project, seminar, industrial training/internship and/or aggregate marks in each academic year provided he/she can be declared to be promoted as per clause 19 by the award of these marks.

10. Structure of Grading of Academic Performance:

The following shall be the structure of grading for academic performance of the students:

10.1 Award of Grades:

Students obtaining grades O to P, shall be declared pass. Students failing in subject, will be awarded

F grade. The grades shall be decided on the aggregate of evaluation of all the components like: -

- (i) Three written tests: CT-1, CT-2 and End Semester Examination
- (ii) Assignments Quizzes, homework, tutorials and regularity in attendance etc.
- (iii) Practical (If part of the course).
- (iv) Practical, Design Project and Project shall be evaluated & graded as per guideline.

Grades	Grade Point (GP)	% of Total Marks obtained in the course
O - Outstanding	10	90%andabove
A ⁺ - Excellent	9	85%andabovebutlessthan90%
A - Very Good	8	80% and above but less than 85%
B^+ - Good	7	70% and above but less than 80%
B – Above Average	6	60%andabovebutlessthan 70%
C - Average	5	50% and above but less than 60%
P – Pass	4	40% and above but less than 50%
F – Fail	0	Less than 40%
AB - Absent	-	Absent

Structure of Grades and Grade Points:

The "W" grade is awarded to a student if he/she is allowed to withdraw for an entire Semester only if he/she has been on authorized absence from the Institute/University on medical grounds for a period exceeding four weeks and informed to the University in time. The "I" grade is awarded to a student who is unable to complete the course

10.2 Evaluation of Performance:

The performance of a student will be evaluated in terms of two indices, viz., the Semester Grade Point Average (SGPA) which is the Grade point Average for a semester and Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters at any point in time. The SGPA is calculated on the basis of grades obtained in all courses, except audit/non-credit courses, registered in the semester.

$$SGPA = \frac{\sum_{i=1}^{\sum c_{i}}}{\sum_{i=1}^{s} C_{i}}$$

Where Ci = Credits of the registered subject

Gi= Grade point awarded to the student in the registered subject

s = Total number of registered subjects in the semester, except audit/non-credit courses.

Here the failed courses are also accounted.

The overall Grade of a student in the program of study up to the end of a particular semester shall be called Cumulative Grade Point Average (CGPA). CGPA shall be calculated on the basis of all grades, except audit courses, obtained in all completed semesters as follows:

$$\sum C_i G_i^n$$

$$CGPA = \frac{i = 1_n}{\sum_{i=1}^n C_i}$$

Where $C_i = Credits$ of the registered subject

 G_i = Grade point awarded to the student in the registered subject

n = Total number of registered subjects, except audit/non-credit Courses. Here the failed courses are also accounted.

The SGPA and CGPA will be rounded off to 2 decimal points and reported in mark sheet, transcripts, etc.

Conversion of Grade in to percentage: The performance of the students is measured in terms of CGPA (on a 10 point scale) as defined above. The equated percentage shall be equivalent to CGPA x 9.5.

Award of Division:

First Division - CGPA of 6.5 and above but less than 10 CGPA (First Division with Distinction will be awarded to those securing CGPA of 8 and above but less than 10 CGPA provided they pass all the examinations in first attempt)

Second Division - CGPA of 5 and above but less than 6.5 CGPA **Third Division** - CGPA of 4 and above but less than 5 CGPA

11. Definition of Credit:

1 Hr. Lecture (L) per week	1 Credit
1 Hr. Tutorial (T) per week	1 Credit
2 or 3 Hours Practical (P) per week	1 Credit

Essential Credits for Under Graduate Degree: The credits essential for obtaining the BCA Degree is 157 credits.

12. Earned Credits (EC):

The credits assigned to a course in which a student has obtained "P" (minimum passing grade) or a higher grade will be counted as credits earned by him/her.

13. Promotion:

A student has to usually earn a minimum 10 number of credits in a semester to be eligible to register for the new subjects offered in the next semester. But in odd semesters if this requirement is not met, the student is to be forewarned and allowed to continue to the next even semester. However at the end of even semesters this requirement will be strictly implemented as detailed in "Eligibility criteria for registering in higher semesters". Students who do not meet this requirement detailed inTable1 are not permitted to register for new subjects in the higher semesters. They have to either register for appearing in examination of the failed subjects in normal semesters in which they are offered subject(s).

Semester	Allotted Credits	Cumulative Credits	Minimum cumulative credits required to register for courses in higher semester
First	22	22	Not insisted
Second	22	44	20
Third	25	79	Not insisted
Fourth	21	90	40
Fifth	23	113	Not insisted
Sixth	22	135	

Table1 Eligibility Criteria for Registering in Higher Semesters

Faculty advisors (Head of Department to designate One Faculty advisor) shall monitor advice and support the students for this. Institute shall make necessary arrangement to inform the students about the minimum cumulative credits requirement to register for higher semester as in Table1.

14. Carryover System:

14.1 A candidate who satisfies the requirements of clause 13 will be required to appear in those theory/practical/other subjects in which he/she failed i.e. secured "F" grade. A candidate has option to pass the failed subjects in summer semester and/or regular semester. It will be open to candidate to either enroll for summer semester by paying applicable fees as decided by University, attend classes and appear in examination at the end of summer semester

will be held in vacations or only appear in failed subject examination in regular semester(s) without attending the classes by merely filling the examination form and paying fee as applicable to appear only in failed subject examinations.

14.2 The highest marks secured in any subjects in various attempts (end semester and carryover examination either in Summer Semester or Regular semester examinations) shall be considered.

15. Results:

The result of a candidate shall be declared on the basis of performance of both semesters of the same academic year.

16. Change of College:

No change of college is permitted within the Uttarakhand state in the University or from / to any other University / College.

17. Award of Rank and Medals:

- 17.1 On the basis of final year result, the top three candidates in BCA shall be awarded rank according to their merit provided they pass all the examinations in first attempt in the minimum duration prescribed for the BCA programme.
- 17.2 The topper of BCA programme will be awarded Vice Chancellor's Gold Medal subject to fulfilment of requirements in Clause 17.1.

18. General Rules:

18.1 Academic Calendar

The exact dates of all important events, such as registration/enrolment, induction, late registration/enrolment, commencement of classes, adding and dropping of courses, submission of documents, examinations, date of showing evaluated answer books, submission of grades, vacation, mid-semester break, etc., during the Academic Session shall be specified in the Academic Calendar of the University.

18.2 Registration/Enrolment

All students are required to register in each semester for the subjects to be pursued by them, as per their programme, on the dates specified in the Academic Calendar of the University. A student must ensure that he/she has completed the pre-requisites, if any, for each subject to be registered. Also, the student/Institute must ensure that there is no conflict in the timetable of the subjects that he/she has registered.

The sole responsibility for registration rests with the student and the institution of study concerned.

18.3 Registration/Enrolment Procedure

A list of subjects to be offered during the semester will be available on the University website and is also made available to the Institute/Department which shall provide the necessary information on the curriculum, subjects offered, rules and procedures, and any other relevant information during registration in each semester. The registration procedure consists of two parts to be completed as per schedule given by the University academic Calendar:

Part 1: filling of the registration form mentioning the subjects to be credited in the next semester.

Part 2: payment of fees and clearance of outstanding dues (if any).

18.4 Late Registration/Enrolment

If for any compelling reason (like illness) a student is unable to register on the day of registration, he/she can register on the late registration day specified in academic calendar on payment of the late registration fee. However, if a student seeks prior permission to register late on valid grounds with recommendation of Director/Principal of college to the University, the University may allow and exempt him/her from payment of late registration fee.

18.5 Adding and Dropping of Courses

A student may add or drop course(s) till the last date(s) specified in the Academic Calendar with the permission of the College/University authorities. For this, he/she must fill the appropriate form, get the endorsement of the HOD and submit the form to the Head of Institution for approval of the University and also online in case of such options being made available by the University. A student may also drop course(s) up to the time of filling examination form whose exact date is specified in Academic Calendar with the following conditions.

1. Dropping of course(s) should not result in a net registration less than the specified minimum number of credits.

2. The request to drop course(s) must be endorsed by the HOD and Head of Institution for the approval of University in hard copy / online if such facility is made available by the University. The dropped subject will not be shown in the grade sheet and transcript of the student.

18.6 Academic Load

Each subject carries a weightage in terms of credits depending upon the number of contact hours (lectures, tutorials, laboratory hours). A student is allowed to register up to minimum credit limit or 20 percent more credits than the normal load prescribed in the scheme of examination for respective semester. Thus a student must register for 18-28 credits in a semester.

18.7 Showing the Answer Scripts:

The answer scripts of all examinations i.e. Class Tests will be shown to student in classroom and the End Semester Examination answer scripts may be shown to the students as per policy prescribed by University from time to time.

Examination Fee for Back Paper per subject will be as decided by the University from time to time will be charged from the students.

18.8 Course Committees and Class Committee:

The Course committee and Class committee are to be put in place for proper monitoring of course progress. Head of Department will be reviewing the activities of 'Course Committee' and 'Class Committee' and ensure the necessary actions to ascertain good quality of Teaching-Learning-Evaluation processes.

18.8.1 Course Committee

There will be a separate 'Course Committee' for BCA programme. The Course Committee will be constituted by the Head of Department concerned. The Chairman of the Course Committee shall be Head of Department concerned.

Members:-

- i) Head of Department
- ii) All teachers of respective Department.
- iii) Four student representatives of respective course, one from each year nominated by the Head of Department concerned.

18.8.2 Class Committee

In BCA programme study will have class committees for every semester constituted by the Head of Department and the Chairman of the committee shall be a faculty member of the department, usually senior most among teachers teaching in the respective semester with Members as detailed below.

1. All faculty members teaching subjects in that semester.

2. Two student representatives of respective class nominated by the Head of the Department. The Course Committees and Class Committees shall meet at least thrice in a semester i.e the first at the beginning of the semester, the second and third after the first and second class tests respectively. Both committee should monitor the conduction of courses, declaration and adherence to the course plan, time schedule, completion of the syllabus, standards of class tests, evaluation process and difficulties faced by the students and take suitable remedial actions at the appropriate time for slow learners and offer further opportunities to advanced learners. At the end of the semester, the committees should meet without student representatives to review the conduction of courses and propose corrections for future improvement.

19. The Academic Council shall have the power to amend/relax any provision provided in the ordinance in any specific matter/situation subject to the approval of Executive Council of the University & such decision(s) shall be reported to the Chancellor of the University.
