

FAR WESTERN UNIVERSITY
FACULTY OF HUMANITIES AND SOCIAL SCIENCES

Bachelor of Computer Application (BCA)

Course Structure 2082 (2025A.D.)



Office of the Dean
Faculty of Humanities and Social Sciences
Mahendranagar, Kanchanpur

Far Western University
Bachelor of Computer Application (BCA)

1. Introduction:

The Bachelor of Computer Application (BCA) program at Far Western University is a four-year undergraduate degree that focuses on Information technology and its real-world applications. It is open to students from any academic background who have completed 12 years of schooling from a recognized board.

This program is ideal for students interested in Information and Communication Technology (ICT), programming, web development, networking, security, Artificial Intelligence (AI) and related fields. It provides a strong foundation in IT and includes elective courses that allow students to explore different areas of modern technology.

In addition to core IT subjects, the program also includes ICT cross cutting courses in mathematics, statistics, geography, economics, sociology, research methodology, and academic writing. These subjects help students develop critical thinking, problem-solving, and analytical skills.

To graduate, students must complete 126 credit hours of coursework. After completing the program, graduates will be prepared for careers in software development, cybersecurity, database management, system and network administration, and other IT-related fields. The program equips students with the skills and knowledge needed to keep up with fast-changing technology and contribute to the growing IT industry.

2. Objective:

The BCA program at Far Western University aims to give students strong knowledge and practical skills in using information and communication technology. It prepares them to design, develop, and apply IT solutions in different areas. Graduates will be equipped with the essential skills to compete and succeed in the global job market.

3. Key Features:

3.1 Course Duration

The academic program spans a total of eight semesters, which is equivalent to four academic years. At the conclusion of each semester, a separate semester-end examination is conducted to assess students' understanding and progress in their respective courses. These examinations play a crucial role in evaluating academic performance and ensuring that students meet the necessary learning objectives before progressing to the next stage of their studies.

3.2 Hours of Instruction:

a) Working days: 48+16 days in a semester

b) Class hours

1. 3 credit hours courses with theory and labs is equivalent to 4 hours lecture and 2 hours lab = 6 working hrs per week.
2. 3 credit hours theory-only course is equivalent to 4 hours lecture = 4 working hrs per week.

3.3 Evaluation

Theory course should have internal weightage of 40% and external weightage of 60%. For the course having lab work, the internal weightage is 40%, lab work weightage is 20% and external weightage is 40%. A student should secure minimum of 40% in each category to pass a course. The final score in each course will be the sum of overall weightage of in all

categories. There will be a separate practical examination for the 20% weightage of lab work conducted by concerned college in the presence of an external examiner.

The project work and internship are evaluated by different evaluators. To pass project work and internship, students should secure at least 40% marks in the evaluation of each evaluator and final score will be the sum of all the evaluations. For the evaluation of final presentation, an external examiner will be assigned from the Controller's/Dean's Office.

3.4 The Grading System

A student having passed his/her 8 semesters (4 years) of study will be graded according to the Far Western university grading System.

4. Attendance Requirement:

Students are expected to attend all theory and practical classes on a regular basis to ensure a comprehensive understanding of the course material. To maintain academic discipline and eligibility for examinations, they must achieve a minimum attendance of 80 percent in each course individually. This requirement applies separately to both theoretical and practical components, reinforcing the importance of consistent participation and active engagement in the learning process. Regular attendance not only enhances students' grasp of the subject matter but also fosters a more interactive and productive academic environment.

5. Final Examination:

The Office of the Controller of Examinations of Far Western University is responsible for conducting the final examinations at the end of each semester. These examinations serve as a crucial assessment tool to evaluate students' academic progress and mastery of the course content. For courses that are purely theoretical, the final examination carries a weightage of 60 percent, ensuring a comprehensive evaluation of students' conceptual understanding. In the case of courses that include both theoretical and practical components, the final examination accounts for 40 percent of the total assessment, with the remaining portion allocated to practical evaluations and continuous assessments. This grading structure is designed to maintain a balanced approach, emphasizing both theoretical knowledge and practical application in the learning process.

6. Eligibility

Students passed 12-th grade/Proficiency Certificate Level or Equivalent Examination from any board/university with second division marks/C Grade/2CGPA will be eligible for the admission.

7. Curricular Structure:

The academic program comprises a total of 126 credits, systematically distributed across eight semesters over a span of four years. Each semester is designed to ensure a balanced workload, allowing students to progressively build their knowledge and skills. As a vital component of the curriculum, students are required to complete projects and internship during the course work of 8 semesters. The projects and internship provide students with practical exposure, enabling them to apply their theoretical knowledge in real-world settings, gain hands-on experience, and enhance their professional competencies before graduating.

Bachelor of Computer Application (BCA) Course Structure

Courses	Credit Hours
Computer Application (Core Courses)	66 (9+9+6+9+12+6+6+6)
Elective Courses	9 (3+3+3)
Mathematics & Statistics Courses	12 (3+3+6)
Language Courses	9 (3+3+3)

Social Sciences Courses	18 (3+6+3+3+3)
Projects & Internships	12 (2+2+2+6)
Total Credit Hours	126

First Semester

S. No.	Course Title	Credits
1	Nepali I (Nepali Writing)	3
2	Basic Mathematics I	3
3	Computer Hardware and Troubleshooting	3
4	Python Programming	3
5	Introduction to Information Technology	3
Total		15

Second Semester

S.No.	Course Title	Credits
1	English I	3
2	Basic Mathematics II	3
3	Object-Oriented Programming with Java	3
4	Discrete Structure	3
5	Computer Architecture and Organization	3
Total		15

Third Semester

S.No.	Course Title	Credits
1	English II (Communication Skills)	3
2	Probability and Statistics	3
3	Numerical Methods	3
4	Database Management System	3

5	Data Structure and Algorithm	3
Total		15

Fourth Semester

S.No.	Course Title	Credits
1	Gender and Development Studies in Nepal	3
2	Network and Data Communications	3
3	21 st Century Life Skills for Social Science	3
4	Artificial Intelligence and Machine Learning	3
5	Web Technology- I	3
Total		15

Fifth Semester

S.No.	Course Title	Credits
1	Sociology in Modern Society	3
2	Net Programming (C#)	3
3	Cyber Security and Ethics	3
4	Software Engineering	3
5	Web Technology- II	3
6	Project I	2
Total		17

Sixth Semester

S.No.	Course Title	Credits
1	Digital Economy	3
2	Data Science	3
3	Information System for Social Science	3

4	Research Methodology	3
5	Elective I: From Group A (Geographical Information System)	3
6.	Project II	2
Total		17

Seventh Semester

S.No.	Course Title	Credits
1	Advanced Java Programming	3
2	Software Project Management	3
3	Applied Economics in Digital Age	3
4	Network Security/ Mobile Application Development	3
5	Elective II: From Group B (Applied Psychology)	3
6	Project III	2
Total		17

Eighth Semester

S.No.	Course Title	Credits
1	Network System Administration	3
2	Cloud Computing and Digital Governance	3
3	Elective III: From Group C (Multimedia Technology for Digital Campaign)	3
4	Internship	6
Total		15

Elective I: Group A

S.No.	Course Title
1	Geographical Information System
2	Multimedia Computing

3	Wireless Networking
4	Digital Marketing
Elective II: Group B	
S.No.	Course Title
1	Information System Audit
2	Cloud Computing
3	Applied Psychology
4	Mobile Application Development
Elective III: Group C	
S.No.	Course Title
1	Multimedia Technology for Digital Campaign
2	IT in Banking
3	Big Data Analysis
4	Introduction to Telecommunications

8. Highlights

Program/Course Name	Bachelor of Computer Application (BCA)
Type	Physical
Eligibility	12 th Grade Pass from any board/university (with 2 nd division marks/C Grade/ 2CGPA)
Duration	Four year (8 semesters)
Admission Process	Based on the entrance exam
Number of Seats	40