



**BCA (Cloud Computing)
Detailed Syllabus**

Semester – VI

3BCC6-PW-001-P

Major Project

Pre-requisites: Strong Knowledge of Programming

Course Category

L	T	P	C
0	0	36	18

Course Objective:

- To apply programming and software development skills learned during the BCA course to solve real-world problems.
- To develop analytical and problem-solving abilities through project planning, design, implementation, and testing.
- To gain practical experience in software development methodologies, tools, databases, and technologies.
- To enhance teamwork, communication, and project management skills while working individually or in groups.
- To prepare students for industry and higher studies by developing professional, technical, and documentation skills through a complete project lifecycle.

Course Outcomes:

Course Outcomes (COs)	Level *
CO1: Identify and describe the concepts, tools, and technologies required for software project development.	L1
CO2: Explain the project requirements, system design, database structure, and workflow of the proposed application.	L2
CO3: Develop and implement a software application using appropriate programming languages, frameworks, and database technologies.	L3
CO4: Analyze system performance, debugging issues, testing results, and user requirements to improve the application.	L4
CO5: Design, build, and present a complete major project solution with proper documentation and innovative features.	L6

**Level of Learning: Level 1 (L1) - Remember ; Level 2 (L2) – Understand; Level 3 (L3) –Applye; Level 4 (L4) –Analyze; Level 5 (L5) -Evaluate;.Level 6 (L6) -Create. Mention the highest level that will be attained in the Course Outcome.*

Articulation Matrix:-

(Program Articulation Matrix is formed by the strength of the correlation of COs with POs and PSOs. The strength of correlation is indicated as 3 for substantial (high), 2 for moderate (medium) correlation, and 1 for slight (low) correlation)

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2
CO1	3	–	1	1	–	–	-	–	–	1	1	-
CO2	3	3	2		–	–	1	–	–	1	1	2
CO3	3	1	3		–	–	-	–	–	2	-	3
CO4	3	–	2	3	–	–	2	–	–	1	1	2
CO5	3	2	3	3	1	–	3	1	–	2	3	1

3High-3 Medium-2 Low-1

BCA(Cloud Computing) Project Guideline

The BCA project is an essential academic requirement aimed at developing students' practical knowledge, research skills, and professional competence. The project work will be conducted in a phased manner as outlined below:

1. Topic Finalization

- Students must finalize their project topic at the beginning of the project cycle.
- Topic selection will be done through a Google Form, which will be shared with students by the project coordinator/guide.
- Topics should be relevant to the BCA curriculum and preferably industry-oriented.
- Once approved, the topic cannot be changed without prior permission from the project guide.

2. Synopsis Preparation and Approval

- After topic finalization, students are required to prepare a Project Synopsis related to the selected topic.
- The synopsis should include:
 - Title of the project
 - Problem definition
 - Objectives
 - Proposed methodology
 - Tools and technologies to be used
 - Expected outcomes
- Students must submit the synopsis for approval.
- After approval, students will prepare a Synopsis Presentation and present it before the guide/committee.

3. Progress Review Four Presentation (Every 15 Days)

- Students must present their project progress at 15-day intervals.
- Each presentation should clearly explain:
 - Work completed so far
 - Challenges faced

- Plan for the next phase
- Continuous evaluation will be done based on progress, clarity, and consistency.

4. Project Report Submission and Review

- Students must prepare the Project Report as per the prescribed university/department format.
- The report will be checked by the project guide for:
 - Content quality
 - Technical accuracy
 - Documentation standards
- Corrections suggested by the guide must be incorporated before final submission.

5. Department-Level Presentation

- After completion of the project, students will give a Department-Level Presentation.
- This presentation will evaluate:
 - Overall project understanding
 - Implementation and results
 - Communication and presentation skills
- Only students who successfully clear this stage will be eligible for the final presentation.

6. Final Presentation (External Evaluation)

- The final project presentation will be conducted in front of an External Examiner.
- Students must present:
 - Project overview
 - System design and implementation
 - Results and conclusions
 - Future scope
- Final evaluation and grading will be done by the external examiner as per university norms.

7. Mandatory Internship Requirement (BCA Students)

- Internship is **mandatory for all BCA students**.
- Each student must complete an internship of **minimum 6 weeks and maximum 8 weeks**.
- The internship must be relevant to the BCA curriculum/project work.
- Submission of a **valid Internship Completion Certificate** issued by the organization is **compulsory**.
- Students who fail to complete the internship or submit the required certificate will **not be eligible for final project evaluation**.

8. General Instructions

- Regular interaction with the project guide is mandatory.
- Students must adhere to timelines strictly.

Attendance in all reviews and presentations is compulsory.

Examination Scheme: Total – 600 marks

Components	Continuous Internal Assessment*	External Assessment (EST #)
Weightage (%)	300	300