

Course Code	Course Name	Credits
26CS251	PROJECT	2

Course Description

The BCA Project course provides students with an opportunity to apply their academic knowledge to develop a real-world software or IT-based solution. It involves project planning, design, development, testing, and documentation, allowing students to gain hands-on experience and understand the complete software development lifecycle.

Course Objectives

- To enable students to apply theoretical knowledge gained during the BCA program to real-world problems.
- To develop practical skills in software design, development, testing, and implementation.
- To enhance research skills, including requirement analysis, documentation, and technical reporting.
- To promote teamwork, project management, and communication skills (for group projects).
- To provide exposure to industry practices, standards, and professional ethics.
- To prepare students for careers in IT by building confidence in handling complete project lifecycles.

Skill Enhancement Outcomes

- Improves ability to write, debug, and optimize code using languages like Java, Python, or C++.
- Develops skills in designing, managing, and querying databases using tools like SQL.
- Provides hands-on experience with tools such as IDEs, version control systems, and testing frameworks.
- Enhances the ability to analyze problems logically and break them into smaller parts.
- Strengthens skills to design effective and efficient solutions to real-world challenges.
- Encourages gathering information, studying new technologies, and applying them in projects.
- Improves the ability to present ideas, write reports, and explain technical concepts clearly.
- Develops collaboration skills by working effectively with others in group projects.
- Builds skills in planning, organizing, scheduling, and completing projects within deadlines.

Course Content and Execution

- Project carried out in stages—planning, design, development, and evaluation.
- Continuous supervision and support from faculty.
- Experience in solving real-world problems.
- Builds confidence to handle projects on their own.
- Develops skills required for professional roles in the IT industry.

Learning Outcome

The course enables students to analyze problems, develop software solutions using modern technologies, and enhance documentation and presentation skills while working independently or in teams with professional ethics.