# PROJECT GUIDELINES FOR BACHELOR IN COMPUTER APPLICATIONS (GENERAL) PROGRAM

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# Project Guidelines

The Bachelor of Computer Applications (BCA) programme prepares the students to take up positions as Programmers, Systems Analysts, Systems Designers in the field related to computer science and information technology or students may go for higher studies in this area.

The courses studied by you during your BCA programme provide you the basic background to work on diverse application domains. The theoretical background of various courses provides you the necessary foundation, principles, and practices to develop effective ways to solve computing problems. The hands on experience gained from the practical courses provide you the knowledge to work with various operating systems, programming languages and software tools.

This project work is kept in BCA program to give you an opportunity to develop quality software solution. During the development of the project you should involve in all the stages of the software development life cycle (SDLC) like requirements analysis, systems design, software development/coding, testing and documentation, with an overall emphasis on the development of reliable software systems. The primary emphasis of the project work is to understand and gain the knowledge of the principles of software engineering practices, and develops good understanding of SDLC.

The BCA students are encouraged to involve themselves completely on the project work in their final semester. It is advised to students to develop their project for solving problems of software industry or any research organization. Doing this will give more exposure to handle real life problems of project development.

Students should take this project work very seriously. Topics selected, should be complex and large enough to justify as a BCA project. The project should be genuine and original in nature and should not be copied from anywhere else.

Learners have to carry out computerization/automation of any business process as a part of this project. They may choose any manual system or may carry modification to the existing applications. Project Report can be done as per the Learners Choice & in any organization, though not mandatory.

Students, who wish to do their Project Report from any organization, are required to take NOC from the concerned organization, to carry out the Code of the Project done.

The project covers Study of existing system & System Requirements, Analysis, Design and Coding. Learners should submit their Project Reports as per the guidelines given by DR.BAOU. Project Reports which are not as per the guidelines will not qualify for evaluation.

## 1) Understanding the significance of Project

Most of the students are under an impression that if good layout is proposed then it will help them in scoring good marks but the quality of project is analyzed by proper write-ups. It provides an opportunity for learners to demonstrate originality and to plan and organize the project work and put the practical approach of all the topics studied in the entire curriculum.

## 2) Meaning of Project

A project is a study of factual information for comprehending and applying the various concepts of the course into practice. Its main purpose is not to generalize but to study the situation with a practical orientation.

## 3) Steps in Project Formulation

a) System Study
b) System Analysis
c) System Designing
d) System Development
e) Implementation and Testing

## 4) Project Supervisor(Guide)

**Projects can be guided by any:**

1) Person having Ph.D./M.Tech. in Computer Science.

**OR**

2) A person having B.E/B.Tech (Computer Science), MCA, M.Sc (Computer Science) with minimum 2 years experience in Industry / Teaching.

## 5) Project Proposal

A proposal as per the format given should be prepared once the topic is selected. It should not be more than 3-4 pages and need not be sent separately. The format for the same is:

a) Title of Project
b) Objectives
c) Need for topic and Modules
d) Tools and Technology to be used in Project.
e) Methodology and Procedure of Work
f) Detailed information of Guide (Name, Address, qualification and Experience)

## 6) No Objection Certificate

If the project is carried out in a company or organization, then a certificate for no objection of same needs to be presented. It should mention that the organization has no objection in publishing the findings of the project study.

The certificate should contain the name of authority with signature and company stamp and should be given on company's letterhead and duly signed by authorized signatory.

## 7) Chapterisation

### Chapter 1: Study of Existing System and System Requirements

- What is the existing system?
- Define its scope.
- How the existing system works?
- What are the issues/problems with the existing system?
- How are you going to improve on the issues/problems with the existing system?

### Chapter 2: Analysis

- Context Diagram
- Data flow Diagram
- Functional Decomposition

### Chapter 4: Design

- ER diagram
- Data Dictionary
- Table Design
- Input forms design
- Report Layouts

### Chapter 5: Coding

- Data Validations

- Sample Code

**Bibliography**

## 8) Suggested list of topics for Project Report

A sample list of topics for BCA-General Project is provided below. This is just a suggested list and students are free to choose any other IT project relevant to BCA curriculum. Students may choose any programming language such as **C, C++, JAVA, VB, etc. There is no compulsion on choosing the project and the software language for the project.**

- Banking System
- Student Information System such as enrolment process, fee status, assignment status, exams status, etc.
- E-commerce
- MIS applications
- Data processing in Warehouse Management
- Role of IT in Project Management
- Vendor Selection System
- Online examination system such as generation of question bank, questions paper, score card etc.
- IT Maintenance/Troubleshooting
- IT in HR application such as payroll system, PF/GPF account maintenance, performance appraisal, leaves management etc.

## 9) Technical Specifications of Project Report

**Length:**
The length of the report should be between 100- 150 pages including the cover page, summary, table of contents, list of figures, list of tables, and acknowledgement.

**Script and Page Format**
The report should be typed using a Word Processor on standard A4 (210 mm x 297 mm) paper size. A conventional font, size 12-point and line spacing of 1.5 mm should be used.

**Margins**
Left-hand margins should have a width of not less than 38 mmt o facilitate binding. The righthand, the top, and the bottom should be 25 mm. Each page must be typed in one side, leaving a wide margin.

**Paper and Print Quality**
Paper and print quality are important for successful legibility. The report can be printed on a standard quality paper, (e.g., photocopy paper)

**Pagination**

Positioning of page numbers should be on top right hand side. Pages starting from the summary until the last list of tables should be numbered using Latin numbers (I, II, III, IV, …). Pages starting from the Introduction until the appendices should be numbered using numbers (1,2,3,…). Pages with figures and tables or illustrations must be also numbered.

**Guard pages/blank** pages at the front and back.

**Binding**

The report should be hard bound.

**Number of copies**

Three copies should be submitted – self copy, University copy, Supervisor (Faculty member in charge) Copy.

**Formats of certificates and pages to be included**

**A. Cover page:** The text highlighted in italics should be changed according to your project.

**PROJECT REPORT**
**On**
***Student Information System***
**SUBMITTED TO THE**
***DIRECTORATE OF DISTANCE & CONTINUING EDUCATION***
**IN PARTIAL FULLFILLMENT OF THE**
**BACHELORS IN COMPUTER APPLICATIONS (General)**

***by***

**Name : ……**
**University Roll No : …….**
**En.Rollment No…….**
**Regn.No…….**

Under the
Guidance of

**Name of Internal Guide**
Designation

**Name of External Guide**
Designation

**B. Certificate from the organization** (to be issued by the organization and the photocopy of the certificate is to be attach)

**C. Certificate from the Guide. (Format of the certificate)**

**CERTIFICATE OF THE GUIDE**

**Mentor / Guide Name:**
**Designation:**

This is to certify that the project report entitled
"_____"
has been prepared by Ms./Mr._____ under my supervision and guidance, for the fulfillment of Bachelors In Computer Applications. His/Her field work is satisfactory.

**Date:** **Signature of Guide**

**D. Format for acknowledgement**

## ACKNOWLEDGEMENT

I convey my sincere gratitude to AGM (HR)/ _____ for giving me the opportunity to prepare my project work in _____. I express my sincere thanks to all the staff members of _____.

I am thankful to _____ for her/his guidance during my project work and sparing her/his valuable time for the same.

I express my sincere obligation and thanks to all the Faculties of DR.BAOU _____ for
their valuable advice in guiding me at every stage in bringing out this report.

**Name:**
**Roll No:**

**E. Format for Declaration**

**DECLARATION**

I do hereby declare that this project work entitled "_____" submitted by me for the partial fulfillment of the requirement for the award of Bachelors In Computer Applications (BCA-General) is a record of my own research work. The report embodies the finding based on my study and observation and has not been submitted earlier for the award of any degree or diploma to any Institute or University.

**Date:** **Name:**

**Roll No:**

**DR.BAOU**
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