BCA Major Project Guidelines

The Bachelor of Computer Applications (BCA) programme is designed with the objective to prepare the students to take up positions in it industries as programmer, systems designers, software engineers, etc. The curricula are designed to provide students comprehensive knowledge covering the skills and core areas of computer science in theory and practical's. Six months major project is part of curricula in last semester of BCA .The objective of the project is to help the student develop the ability to apply theoretical and practical tools / techniques to solve real life problems related to industry, academic institutions and research laboratories. In the major project students are supposed to develop quality software solutions by applying theoretical and practical knowledge of various courses learnt. The project work is divided into two subjects (6BCACCC13 & 6BCACCC14) single project topic will be finalized and following working is divided into two parts.

"6BCACCC13 Project Analysis and Design" will cover following:

1. Problem definition
2. Analyze Systems requirements.
3. Plan the systems design phase of the SDLC.
4. Decide the s/w requirement specifications and h/w requirement specifications.
5. Perform and evaluate feasibility studies like cost-benefit analysis, technical feasibility, time feasibility and operational feasibility for the project.
6. Work on data collection methods for fact finding.
7. Construct and evaluate data dictionaries/ decision trees/ decision table.
8. Create and evaluate graphical tools as systems flow charts, entity-relationship (er) diagrams and state transition diagrams.
9. Construct and evaluate data flow diagrams.

"6BCACCC14 Project Development and Implementation" will cover following
1. Perform coding for the project.
2. Design and evaluate system outputs.
3. Design and evaluate systems inputs.
4. Design and evaluate validity checks for input data.
5. Design and evaluate user interfaces .
6. Documentation of requirements
7. Prepare documentation of project
8. Perform various testing techniques/strategies.
9. Generate various reports in project.
10. Deploy the project on machine/lab/real time environment
11. Define the future scope and further enhancement of the system.
12. Add Appendices (if any) to be placed in support with the project report documentation.

Subject Code	Subject Name	L	T	P	C	Theory Marks	Internal Marks	Practical Marks	Total Marks
6BCACCC13	Project Analysis and Design	0	2	4	6	00	20	80	100
6BCACCC14	Project Development and Implementation	0	2	4	6	00	20	80	100

GUIDELINES FOR BCA PROJECT

- Only one project topic will be finalized for both subject (6BCACCC13 & 6BCACCC14)
- The project work should normally include software development.
- The students are expected to work on real-life project. However, it is not mandatory for a student to work on a real-life project.
- Not more than two students are permitted to work on a project.
- The project may be done in the university campus/concern study institute or in an approved sponsoring organization (industry/ research and development laboratories / educational institution / software company related to the proposed topic.
- The student can formulate a project problem with the help of her/his supervisor and if approved, the students commence working on it.
- A candidate is required to present the progress of the project work during the semester as per the schedule.

PROJECT SYNOPSIS FORMAT

The project proposal should be prepared and approved in consultation with supervisor. The project proposal should clearly state the project objectives and the environment of the proposed project to be undertaken. The project proposal should contain complete details in the following form:

1. Title of the project
2. Name of the supervisor (external supervisor(company)from / internal supervisor (teacher of the BCA)
3. Introduction and objectives of the project
4. Analysis (DFD, ER diagrams, class diagrams, time line etc. As per the project requirements).
5. A complete structure which includes:
   - Name of modules and their description
   - Database / data structures description
   - Process logic of each module(flow chart)
   - Reports generation. (repot format)
6. Tools / platform, hardware and software requirement specifications
7. Organization/ company details with profile of supervisor (if project is carried out outside the department)

PROJECT REPORT FORMULATION

Good quality white executive bond paper A4 size should be used for typing and duplication. Care should be taken to avoid smudging while duplicating the copies.

Page specification: leftmargin-3.0cms, right margin- 2.0 cm, top margin 2.54 cm, bottom margin 2.54 cm, line spacing – single, font size – 12 for normal text, 14 for headings, 16 for chapter heading, page numbers - all text pages as well as program source code listing should be numbered at the bottom of the pages. Employ MS-Word or open source software.

The project report should contain the following:

1. Front page – black color with golden or white text.

2. Certificate from the supervisor with her/his signature and date.

4. Certificate from company/industry in their letter head (if project is carried out outside the department)

5. Certificate of originality/ self certificate

6. The project report documentation should include the following topics (as per the project requirements).

1. Acknowledgement
2. Table of contents / index with page numbering
3. Introduction / objectives of the project
4. System analysis
5. Feasibility study
6. Software and hardware requirement specifications
7. System design
8. Coding
9. Validation checks
10. Implementation and maintenance
11. Testing (testing techniques and testing strategies used along with the test data and the errors listed for each test case).
12. Reports, tables figures should be properly numbered/labeled
13. Screen shots of projects
14. Conclusion
15. Future scope and further enhancement of the project
16. Bibliography/ references
17. Appendices (if required)
18. Soft copy of labeled and signed project cd should be in a thick envelope pasted inside of the back cover of the project report.

Two copies of the original project report in bound form are to be submitted. Each group is required to prepare individual copy of project report in cd and submit along with his/hers project report in MS-Word as well as PDF. The same must contain the report, results, screenshots, errors, databases, source codes (wherever it is not feasible explicit approval from the supervisor must be obtained).

Project evaluation

Single project report will prepared and submitted by each group of students for both (6BCACCC13 and 6BCACCC14). The project report should be prepared as per given guideline.

To fulfill the above three presentation must be carried out phase wise in the whole semester for internal assessment of the project.

Format of Front Page

A PROJECT REPORT ON

"……… TITLE OF THE PROJECT ………."

SUBMITTED IN PARTIAL FULFILLMENT O THE REQUIREMEN FOR THE AWARD OF THE
DGREE BECHLORE OF COMPUTER APPLICATION

SESSION :20XX-20YY

Project Guide Name   Submitted BY
External Guide (if any) :   Name of Student
                                                           Enrollment No.
                                                           Roll No.
Internal Guide :   Study Institute code No.
(BCA Faculty)   Name of Students
                                                            Enrollment No.
                                                           Roll No.
                                                           Study Institute code No.

Submitted to

Makhanlal Chaturvedi National University of Journalism and Communication, Bhopal

Name of Study Institute

Project Certificate

This is to certify that the project report entitled _____
submitted to Makhanlal Chaturvedi National University of Journalism & Communication, in partial fulfillment of the requirement for the award of the degree of BACHELOR OF COMPUTER APPLICATIONS (BCA), is original work carried out by myself Mr / Ms ------- with enrolment no. _____ Under the Supervision of Prof/Dr/Mr/Ms -------- .

The matter embodied in this project is genuine work done by myself and has not been submitted whether to this University or to any other University / Institute for the fulfillment of the requirement of any course of study.

Date:

                                               Name & Signature of the Student

                                               Contact Details (Email, Phone & Address)

                                               ………………..

                                        Verified by the Supervisor

                                               Name & Signature of the Supervisor/s

                                               Date: ………………..

<u>Acknowledgement</u>

       This Major Project is the result of contribution of many mind. I would like to acknowledge and thank my project guide .... (Faculty Name) for his/her valuable support and guidance. He/she guided me through the process from conception and till the completion of this project. I would also like to thanks my class teacher/institute director   ....and my all my faculties .... I thank to lab staff members......................and other non-teaching members.

       I am very thankful for the open-handed support extended by many people. While no list would be complete, it is my pleasure to acknowledge the assistance of my friends who provided encouragement, knowledge and constructive suggestions.

Signature of Student
(Name of student)
(Roll No   ------------)
(Enrollment No --------)

Self-Certificate

   This is to certify that the Major Project report entitled "-- ------------" is done by me, and it is authentic work carried out for the partial fulfillment of the requirements for the award of the degree of Bachelor of Computer Application(BCA) under the guidance of....................(Faculty name). The matter and software embodies in this project has not been submitted earlier for award of any degree or diploma to the best of my knowledge and believes.

                     Signature of Student
                      (Name of student)
                      (Roll No   ------------)
                      (Enrollment No --------)

Certificate from Project Guide

This is certify that this Major Project entitled "----------------------------------" submitted in partial fulfillment of the requirements for the award of the degree of Bachelor of Computer Application (BCA) in session (years 20—to 20---) to the   Makhanlal Chaturvedi National University of Journalism & Communication, Bhopal, done by _____(student name) is an authentic work carried out by them at "… …………………………….…… "(study Centre name /department name) (Place) under my guidance. The matter and software embodied in this project work has not been submitted earlier for the award of any degree or diploma to the best of my knowledge and belief.

Signature of BCA Teacher

(Project Guide)