## BACHELOR OF COMPUTER APPLICATIONS PROJECT GUIDELINES

# College Of Management And Computer Science, Yavatmal College Code 457

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. We had therefore imparted the comprehensive knowledge covering the skills and core areas of computer science courses with equal emphasis on the theory and practice in BCA programme.

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.

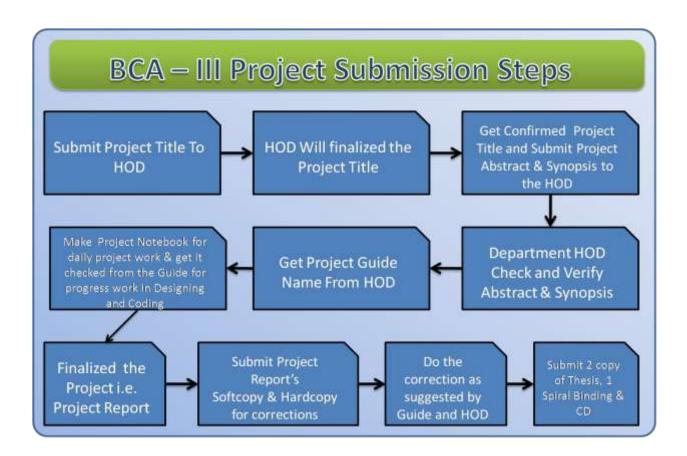
The courses studied by you during your BCA programme provide you the basic background to work on diverse application domains. The theoretical background of various courses provides you the necessary foundation, principles, and practices to develop effective ways to solve computing problems. The hands 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 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.

Students should take this project work very seriously. BCA project should be taken as an opportunity to develop software, which gives exposure to SDLC. 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. If found copied, the project report will be forwarded to the Exam Discipline Committee of the University as an Unfair means case for necessary action. Students should strictly follow and adhere to the BCA project guidelines.

### **Calendar For The Project**

Sr. No.	Topic	Date
1	Topic Finalized	Before 20/September/ 2017
2	Submission Of the Project Abstract And Synopsis	Before 25/December/2017
3	PPT Presentation	January 2018 First Week
4	Submission of the Project Report (one copy)	Before 15/February/2018
5	Submission And Viva to be conducted	In February Last Week OR In March First Week *



#### Ensure that you include the following while submitting the Project Proposal:

- 1. Project notebook signed by the Project Guide with date.
- 2. Project Report Hardcopy and Softcopy. (Including Project Report, Project Source Code)
- 3. Synopsis of the project proposal (5-7 pages).

#### **GUIDELINE FOR PROJECT FORMULATION**

#### **TYPE OF PROJECT**

As majority of the students are expected to work out a real life project in some industry/research and development laboratories/educational institutions/software companies, it is suggested that the project is to be chosen which should have some direct relevance in day-to-day activities of the candidates in his/her institution. Students are encouraged to work in the areas listed at the end. However, it is not mandatory for a student to work on a real life project. The student can formulate a project problem with the help of Guide.

#### PROJECT PROPOSAL (SYNOPSIS)

The project proposal should be prepared in consultation with your guide. The project proposal should clearly state the project objectives and the environment of the proposed project to be undertaken. The project work should compulsorily include the software development. The project proposal should contain complete details in the following form:

- 1. Title of the Project
- 2. Introduction and Objectives of the Project
- 3. Project Category (RDBMS/OOPS/Networking/Multimedia/Artificial Intelligence/Expert Systems etc.)
- 4. Analysis (DFDs at least up to second level , ER Diagrams/ Class Diagrams/ Database Design etc. as per the project requirements).
- 5. A complete structure which includes: Number of modules and their description to provide an estimation of the student's effort on the project. Data Structures as per the project requirements for all the modules. Process Logic of each module. Testing process to be used. Reports generation ( Mention tentative content of report)
- 6. Tools / Platform, Hardware and Software Requirement specifications
- 7. Are you doing this project for any Industry/Client? Mention Yes/No. If Yes, Mention the Name and Address of the Industry or Client
- 8. Future scope and further enhancement of the project.

Incomplete project proposals in any respect will be summarily rejected.

#### PROJECT REPORT FORMULATION

#### ITEMS TO BE INCLUDED IN THE PROJECT REPORT

1. The following items should be included in the Project Report:

The project report must contain the following:

- 1. Introduction
- 2. Objectives
- 3. Tools/Environment Used
- 4. Analysis Document (This should include SRS in proper structure based on Software Engineering concepts, E-R diagrams/Class diagrams/any related diagrams (if the former are not applicable), Data flow diagrams/other similar diagrams (if the former is not applicable), Data dictionary)
- 5. Design Document (Modularization details, Data integrity & constraints including database design, Procedural design, User interface design)
- 6. Program Description (<u>Detailed specification instead of code\*</u>, Comments & Description.)
- 7. Testing (Test case designs are to be included separately for Unit testing, Integration testing, System testing; Reports of the outcome of Unit testing, Integration testing, System testing are to be included separately. Also, details of debugging and code improvement are to be included.)
- 8. Input and Output Screens
- 9. Implementation of Security for the Software developed (In case, you have set up a User Name and Password for your software, you should ensure the security of User Name and Password during transmission to server)
- 10. Limitations of the Project
- 11. Future Application of the Project
- 12. Bibliography

The project report should be hard bound; should consist of a Contents page; all pages of report should be numbered; content should be well organized in a meaningful manner; printouts of text & screen layouts should be original and should not be xeroxed)

- 2. Synopsis
- 3. Certificate of Originality (Format given).
- 4. The Project Report may be about 50 to 80 double spaced A-4 size typed pages (excluding program code).

#### IMPORTANT POINTS WHILE PREPARING THE PROJECT REPORT

- 1. The Project Report should be submitted in A-4 size typed in double space. The Project Report should be hard bound. (Font size normal 13, Heading 16 and Subheading 14)
- 2. Ensure that it contains the following:
  - All the items should be filled. The signatures of both student and Guide should be present.
  - Project Synopsis. Both Guide and student should sign on the Project Synopsis.
  - Certificate of Originality (Format given)
  - All signatures should be accompanied by the date of signature.
- 3. If any project report is received in the absence of the items listed above, it will be rejected and returned to students for compliance. Also, violation of Project Guidelines may lead to rejection of the Project .
- 4. Two hard bound original copy and one Spiral bound copy of the project report is to be submitted to the College. One copy of the same Project Report is to be retained with the student and the student is supposed to carry his copy while appearing for viva voce. Spiral binding of Project Report is not permitted.
- 5. Xerox copy of the project report is not acceptable.
- 6. Not more than one student is permitted to work on a Project.
- 7. If the title of the Project differs from the title mentioned in the Project Proposal, the Project Report will be rejected and will be returned back to the student.

### **CERTIFICATE OF ORIGINALITY**

This is to certify that the project report entitled	
Submitted to Sant Gadge Baba Amravati University, A	Amravati in partial fulfilment of the
requirement for the award of the degree of BACHELOR	OF COMPUTER APPLICATIONS (BCA),
is an original work carried out by Mr./ Ms	·
Enrolment No.: under the guidance of Mr./ N	VIs
The matter embodied in this project is a genuin	e work done by the student and has
not been submitted whether to this University or to an	y other University / Institute for the
fulfilment of the requirement of any course of study.	
Signature of the Student Name and Address of the student:	Signature of the Guide Name, Designation and Address of the Guide
Enrolment No.:	