

## **Project Guidelines for MCA**

### **(Online Degree Programs)**

The Capstone Project is an independent software development endeavor where students select a topic of interest to investigate, delve into the corresponding academic discussions within the relevant field, and, under the supervision of a faculty mentor or adviser, generate an extensive document demonstrating a profound comprehension of the subject matter under the guidance of the faculty.

#### **Project Guidelines:**

1. An orientation session will be conducted for the students.
2. Students will be provided with a list of programming subject in which they can create projects. The programming subjects are:
  - C Programming.
  - C++ Programming
  - Java Programming
  - .Net Framework Technology
  - Web Technologies
  - Python Programming
  - SQL for Backend
3. The Guide is selected by the student and approved by the university. The guidelines to select the Guide will be provided to the students.
4. Students will Submit Synopsis with Project Guide Declaration.
5. It is the sole responsibility of the students to identify, engage and ensure completion of the project.
6. The student must submit the project in the specified timeline provided by the university.
7. The project submission followed by viva voce and its scoring is an integral part of awarding the degree.

## **Guidelines for Selecting a Guide for the Capstone Project**

Choosing the right Project Guide is a critical step in ensuring the success of your capstone project. Here are the guidelines you need to follow to select an appropriate Project Guide:

### **1. Eligibility Criteria for Project Guides**

The Project Guide must meet the following criteria:

- **Affiliation:** The Project Guide should be affiliated with a University/Institute that is recognized by the University Grants Commission (UGC) of India. Alternatively, the Project Guide can be a senior professional with at least 3 years of relevant experience in the industry.
- **Position:** The Project Guide must be a permanent faculty member of the University/Institute or a senior professional in an organization or consultancy.
- **Experience:** The Project Guide should have a minimum of 3 years of professional experience.
- **Relevance:** The Project Guide should have a background relevant to your course.

### **2. Documentation Required from Project Guide**

- To ensure the eligibility and suitability of your chosen Project Guide, the following documentation must be submitted:
- **Resume:** You must upload the resume of your selected Project Guide on the designated portal. The resume should highlight the Project Guide's qualifications, professional experience, and current position.
- **Letter of Acceptance:** The student must submit the letter of acceptance duly signed by the chosen guide. The format will be provided to the students.

## **Selecting the Right Project Guide**

When choosing your Project Guide, consider the following tips:

- **Expertise and Experience:** Ensure that the Project Guide has significant experience and expertise in the subject area of your project. This will help you get better guidance and insights.
- **Availability:** Choose a Project Guide who is available and willing to dedicate time to guide you throughout your project. It is important that they can commit to regular meetings and provide timely feedback.
- **Communication:** Select a Project Guide with whom you can communicate easily and effectively. Good communication is key to a successful mentor-mentee relationship.
- **Interest and Enthusiasm:** Your Project Guide should show interest and enthusiasm for your project. Their passion can be a great motivator and help you stay focused and driven.

**Synopsis of the MCA-IV Capstone project proposal (10-12 pages) covering the following aspects:**

1. Title of the Project.
2. Introduction and Objectives of the Project.
3. Tools/Platform, Hardware and Software Requirement specifications.
4. Problem Definition, Requirement Specifications (Detailed functional Requirements and Technical Specifications), Project Planning and Scheduling (Gantt chart and PERT chart).
5. Analysis (Data Models like 0, 1 and 2 level DFDs, Complete ER Diagrams with cardinality, Class Diagrams etc. as per the project requirements).
6. A complete structure which includes:
  - a. Number of modules and their description to provide estimation of the
  - b. student's effort on the project. Along with process logic of each Module.
  - c. Data Structures as per the project requirements for all the modules.
  - d. Process Logic of each module.
  - e. List of reports that are likely to be generated.
7. Proposed security mechanisms at various levels
8. Future scope and further enhancement of the project.
9. Bibliography

**GUIDELINES FOR PREPARING SYNOPSIS**

The report should be presented in the following format only:

- (a) The report should be on A4 size paper.
- (b) The font used should be Times New Roman and font size should be 12 for text, 14 for Headings and 16 for Chapter Title.
- (c) The top, bottom & right margins should be 1" each. The left margin should be set at 1.5".
- (d) The line spacing should be fixed at 1.5 lines.
- (e) Page numbers should be placed at bottom middle position
- (f) Figure should have caption with figure number
- (g) Tables should have caption with table number.

**Synopsis  
On**

**“TITLE OF THE PROJECT”**

Submitted to the **Uttaranchal University** in partial fulfilment of the  
requirements for the award of the Degree of  
**MASTER OF COMPUTER APPLICATIONS**

Submitted by

**Student Name**

**(Learner ID: \_\_\_\_\_)**

Under the Guidance of

**Guide Name with Designation (Faculty Guide)**

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