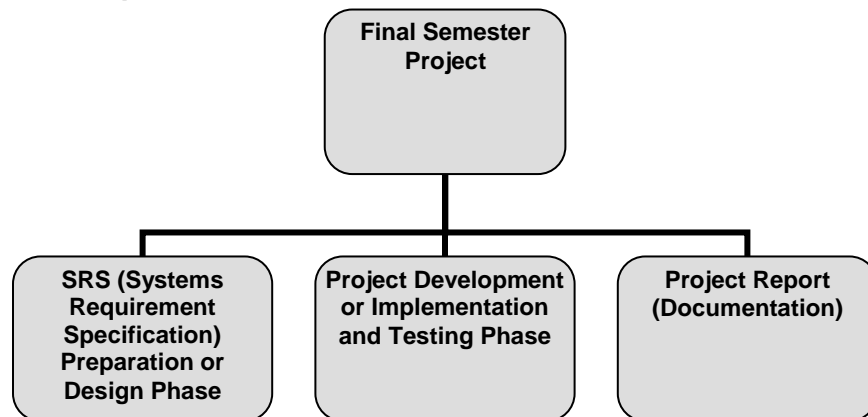


## Project Guidelines

### Final Semester Project Preparation and Submission Guideline

- Students must submit his/her project synopsis to the respective centre along with his / her name & number, centre code & address etc., and get it approved by them.
- Projects must be done individually.
- Must submit the final report within the stipulated time in the form of soft and hard copy to the study centre.
- The University will evaluate projects of Sixth Semester B.Sc. – IT (Feb 2009) by conducting **Final Semester Project Internal Examination** through internal & external examiner.
- Students must demonstrate their project at their study centre to the internal & external examiner on the date specified by the university. The date will be mentioned in the university term-end examination time table.
- Two sets of soft and hard copy must be submitted to the centres by the students along with the source code and executable file. The same must be submitted to the centre two week before the date of final semester term-end examination.

### ❖ Project Development



The project under development must follow all necessary steps of software engineering. Broadly, the project may be developed in two phase:

#### Phase 1: Requirement Analysis and Design Phase

This phase may involve preparing the Requirement specification, performing system analysis, preparing the data and control flows and performing the design of the project.

- Students must strictly implement the various stages of software development process.
- Implement the various activities that are performed during the Requirements phase and support it with proper outputs and Data flow diagrams (various levels of DFD's), data dictionary... etc.

- Generate the appropriate SRS with focus on all the components of SRS and generate Decision trees.
- Identify the appropriate Design principle suitable for your project.
- Indicate the strategy used and substantiate it with brief explanations.
- Properly document the detailed design specifications and methods adopted during Design phase.
- Perform Design Walkthroughs, Critical design review and present the output at each phase.
- Tools like Rational Rose could be used in the design stage of the development process in which case the state flow diagrams should be added to the project report.

### **Phase 2: Development and Testing phase**

This phase may involve actual development of the software coding, preparing test plans, testing and implementation details.

- Perform **coding** of the project with the software used.
- Adopt an appropriate **testing** procedure for your project.
- Prepare all necessary **documentation** to support all the work done in your project.
- In case of adopting Functional approach to testing, draw the Cause-Effect graph.
- Students can make use of testing tools such as Rational TeamTest, WinRunner, SilkTest... etc.
- Project has to be supported by proper documentation that would facilitate better understanding of the project as well as easier maintenance.
- Prepare all required documentation.

### **❖ Project Synopsis and Final Report format**

**Synopsis of Project:** Synopsis of project must contain following information:

1. Title of the project
2. Objective of the project.
3. Tool(s) to be used
4. A complete structure of the program
  - i) Requirement Analysis
  - ii) Module description, Structure charts
  - iii) Data flows Diagram, data dictionary, database structure (tables etc.)
  - iv) State flow diagrams
  - v) Implementation procedure
  - vi) Testing Plan.
5. Any other relevant information.

**Final Project Report:** Project Report must contain following information:

1. The length of the report may be about 40 to 50 pages, with 1.5 line spacing, 1.25 inches margin on either side, printed on A4 size papers. Ten percent variation on either side is permissible.
2. **It must contain the following:**
  1. Title Page

2. Certificate,
3. Declaration
4. Acknowledgement,
5. Abstract
6. Contents
7. Introduction
8. Objectives
9. Problem Statement
10. Requirement Analysis, SRS (Logical DFD, Data dictionary, Decision Tables & Trees)
11. Analysis and design (Structure Charts, data flows)
12. Coding
13. Testing procedures,
14. Testing reports
15. Documentation
16. Future application
17. Conclusion
18. Bibliography

<b>Technology/Programming Language/ Software</b>
Microsoft Technology ( . NET technology for example )
Sun Microsystems technology (J2EE based for example)
Oracle, SQL server ( Data Base software)
Programming/ Scripting Languages: C, C++, VB, Java, JavaScript, VB-Script, HTML, XML
<b>(Note: MS- Access cannot be used as Database )</b>
<b>Few Domains/Areas that can be chosen</b>
Client-Server software : (Banking application, Railway, University application to name a few )
WEB applications ( Portals, Web services, E-commerce sites, Social Networking applications, Blog Engines to name a few)
Gaming software/ Virus /Antivirus software/Audio- Video Players/ Language Tutors system/application software
Computer Networking Projects based on various protocols

**Project Assessment Pattern:**

- 1) Continuous Assessment by Guide (Internal): 120
- 2) Project Evaluation and Viva-Voce (External): 280