Program Structure of M.Sc (Information Technology)

1. Program Mission

To provide education in the futuristic and emerging frontier areas of Information Technology through knowledge, learning research and innovation. To develop the overall personality of students by making them not only excellent professionals and technocrats but also good individuals with regards for human values, pride in their heritage and culture, a sense of right and wrong and yearning for perfection and imbibe attributes of courage of conviction and action.

2. Program Educational Objectives/Goals:

- The graduates will have strong analytical, problem-solving and critical-thinking skills.
- The graduates will serve local and global IT organizations and work towards providing innovative solutions to current and futuristic organizational and societal problems.
- The graduates will have research skills necessary to solve IT problems
- The student shall have the ability to examine the impact of IT solutions in societal, health, safety, legal, cultural and environmental contexts.
- The graduates will have strong interpersonal communication, practice professional ethics and have the capability to work as an individual/ member of a team/ leader of diverse teams/entrepreneur.
- The student will have the ability to support and practice independent and life-long learning for professional development and sustainable performance.

3. Programme Learning Outcomes: Graduates of the program will have an ability to:

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Identify and analyze user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing-based systems.
- Carry out investigations of problems using research-based knowledge and research methods to provide valid conclusions.

4. **Skills & Competencies**
    1. Programming Skills
    2. Critical thinking and Research Skills
    3. Artificial Intelligence
    4. Project Management Skills
    5. Data Communication & Networking Skills
    6. Software Engineering Skills