

# CS723 SOFTWARE ENGINEERING

**Prerequisite:** Programming Methodology

**Aim:** This course emphasizes software engineering principles and leans more toward the theoretical foundations.

**Course Content:**

Introduction to System Concepts, Software Engineering Concepts, SE Methodology, Life Cycle Models, Software Development Approaches: Waterfall model, Boehm's spiral model. Requirements Analysis, Specifications verification and validation, Coding Principles and Programming Techniques, Software Testing, Future trends in SE.

**Books:**

1. Ian Sommerville: Software Engineering, Addison-Wesley, 5<sup>th</sup> edition, 1998.
2. R. Pressman: Software Engineering - a practioner's approach, McGraw Hill - 1992.
3. Carlo Ghezzi, etal: Fundamentals of SE, PHI New Delhi 1995.
4. P. Jalote: An Integrate approach to SE, Narosa Publishers, 1992.