

CA525 SOFTWARE ENGINEERING

Prerequisite: CA521 Programming Methodology; CA522 Data and File Structures

Aim: To introduce the principles, concepts and practices of software engineering

Course Content:

Introduction to System Concepts, Software Engineering Concepts, SE Methodology, Life Cycle Models, Software Development Approaches, Need for Management and Role of Management in SE, Requirements Analysis, SADT, Alternative Analysis Techniques, Formal Approaches in SE, Design Techniques, Role of PL in Software Development, Coding Principles and Programming Techniques, Software Testing, Software Configuration Management, Software Maintenance and Current and Future trends in SE.

Books:

1. R. Pressman: Software Engineering - a practitioner's approach, McGraw Hill - 1992.
2. Ghezzi, et al: Fundamentals of SE, PHI New Delhi 1995.
3. P. Jalote: An Integrate approach to SE, Narosa Publishers, 1992.
4. Yourdon: Modern Structured Analysis, PHI New Delhi 1995.
5. Harwiz kwiz: Systems Analysis and Design, PHI New Delhi 1995.
6. Jag Sodhi: SE - Management Application and Tools, McGraw Hill, 1987.