

2.18 30330 SOFTWARE ENGINEERING

UNIT-1 INTRODUCTION TO SOFTWARE ENGINEERING

- 1.1 Basics of Software Engineering
- 1.2 Software Development Life cycle
- 1.3 Software Development Life Cycle Models
- 1.4 Software Requirement Analysis

UNIT-2 SOFTWARE DESIGN AND PLANNING

- 2.1 Software Design
- 2.2 Software Planning
- 2.3 COCOMO Model
- 2.4 CASE

UNIT-3 SOFTWARE MAINTENANCE AND RISK MANAGEMENT

- 3.1 Software Maintenance
- 3.2 Software configuration management activities
- 3.3 Risk management
- 3.4 Project scheduling

UNIT-4 SOFTWARE TESTING

- 4.1 Software Testing
- 4.2 Levels of testing
- 4.3 Software Testing strategies
- 4.4 Testing Tools

UNIT-5 SOFTWARE RELIABILITY AND QUALITY ASSURANCE

- 5.1 Software Quality Assurance
- 5.2 CMM - Five levels - ISO 9000
- 5.3 Software Reliability
- 5.4 Reverse Software Engineering

Reference Books:

- 1 Software Engineering by Ian Sommerville, Pearson Education
- 2 Software Engineering – A practioner’s Approach by Roger S. Pressman, McGrawHill
- 3. Software Engineering by Sajan Mathew, S. Chand & Company Ltd
- 4. Integrated approach to Software Engineering by Pankaj Jalote, Narosa Publishing House, 2004
- 5. Software Engineering fundamentals by Ali Behforouz and Fredick J Hudson, Oxford University press, 2005