

Topics for Software Engineering

Comprehensive Exam

Posted: October 2007

- Topics from Software Engineering, by Sommerville, 8th edition, 2007
 1. System Engineering; Organizations, people and computer systems
 2. Legacy Systems (Chapter 2)
 3. Software Processes (Chapter 4)
 4. Project Management (Chapter 5)
 5. Project Management (Chapter 5)
 6. Requirements Engineering Processes (Chapter 7)
 7. System Models (Chapter 8)
 8. Formal Specification (Chapter 10)
 9. Architectural Design (Chapter 11)
 10. Application Architectures (Chapter 13)
 11. Object-oriented Design (Chapter 14)
 12. Real-time Software Design (Chapter 15)
 13. User Interface Design (Chapter 16)
 14. Rapid Application Development; Software Prototyping (Chapter 17)
 15. Application System Reuse (Chapter 18)
 16. Software Testing (Chapter 23)
 17. Software Cost Estimation (Chapter 26)

18. Quality Assurance and Standards; Quality Planning and Quality Control (Chapter 27)
 19. Configuration Management(Chapter 29)
- Other suggested references:
 1. Software Engineering Concept, by Richard Fairley, 2nd editon (Chapter 1 to Chapter 6)
 2. Materials from Lecture Notes by Dar-Biau Liu