

Software Engineering

CSE470

Spring 2002

Topics to be Covered in Exam

- General information regarding software engineering (Ghezzi 1,2,3,7, Lecture Notes)
- Some embedded systems (See lecture Notes)
- Requirements Analysis: (Douglass 1,2, Lecture Notes)
 - Structured
 - Object-Oriented
- UML: (Lecture Notes, Douglass: 3,4)
 - Use cases
 - Sequence diagrams
 - Class diagrams
 - State diagrams
- Quality Assurance (Ghezzi: 5, Lecture Notes)
 - Formal Specifications.
(Lecture Notes : Formal Methods and Model Checking. Be at least familiar with the formal proof done in class)
 - Inspections
- System Design (Lecture Notes)
- Testing and Debugging (Lecture Notes)
- General modeling principles
- You should be able to do the following:
 - For a sample problem, create all 4 types of UML diagrams that we covered in class.
 - Translate a state diagram into Promela
 - Convert a safety or liveness property into an LTL specification