



# CS350 : Introduction to Software Engineering

## Spring 2016

*Korea Advanced Institute of Science and Technology*

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**Instructors:** [Jongmoon Baik](#)

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Office Hours: MON & WED: 10:30AM-12:00PM

**Class Hours:** MON & WED 09:00 – 10:15 AM

**Room:** ITC Building (N1), Lecture Room 112

**Prerequisites:** None

**Teaching Assistant:** **Jong-In Jang**

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Office Hours: **N1, Room 403, THU 14:30-17:30**

**Text Book:** Roger S. Pressman & Bruce Maxim, Software Engineering: A Practitioner's Approach, McGraw-Hill, 8<sup>th</sup> Edition, ISBN-13: 978-0078022128/\_ISBN-10: 0078022126.

**References:** TBA

**Class homepage:** <http://spiral.kaist.ac.kr/wp/2016springcs350/>

**Grading Policy:**

- ❖ Exams (40%) – Individual work
  - Midterm (20%)
  - Final (20%)
- ❖ Term Project (50%) – Group work
  - Assignment reports (20%)
  - Final project report and presentation (30%)
- ❖ Participation, Attendance & Instructor Judgment (10%)

**Objective:** Software engineering is the systematic discipline that helps to create practical, cost-effective solutions to the problems in developing software systems. The primary objectives of this course are to provide the fundamental knowledge of software engineering, including understanding software requirements, effective methods of design, coding, and testing, and the application of software engineering tools.

**Assignments:**

- ✓ Each assignment is due by the beginning of class on the date due
- ✓ Submit the assignment reports to the TA electronically
- ✓ Submit a hard copy of the assignment report at the class
- ✓ Put your team name, each member's name and ID to reports

**Course Policies:**

- ✓ Academic Dishonesty: *Plagiarism* is serious offense and may be punished by failure in course and or expulsion from the University
- ✓ Attendance: Students who fail to attend more than 15% of the classes without proper notice will get the 'F' grade

## Course Schedule

| Week | Day  | Topic  | Reading     |
|------|------|--|-------------|
| 1    | 3/2  | - Course Overview & Process Models                   | Ch. 1       |
|      | 3/7  | - Agile Development                                  | Ch. 2       |
| 2    | 3/9  | - Estimation for Software Projects                   | Ch. 26      |
|      | 3/14 | - Project Mgmt. & Scheduling                         | Ch. 24 & 27 |
| 3    | 3/16 | - Software Risk Mgmt.                                | Ch. 28      |
|      | 3/21 | - SW Eng. Principles                                 | Ch. 4       |
| 4    | 3/23 | - Understanding Requirements                         | Ch. 5       |
|      | 3/28 | - Requirement Modeling I                             | Ch. 6       |
| 5    | 3/30 | - Requirement Modeling II                            | Ch. 7       |
|      | 4/4  | - Design Concept                                     | Ch. 8       |
| 6    | 4/6  | - Architectural Design                               | Ch. 9       |
|      | 4/11 | - Conceptual Level Design                            | Ch. 10      |
| 7    | 4/13 | - <b>National Holiday (The legislative election)</b> |             |
|      | 4/18 | - SW Configuration Mgmt.                             | Ch. 22      |
| 8    | 4/20 | <b>Mid-term EXAM</b>                                 |             |
|      | 4/25 |  |             |
| 9    | 4/27 | - Quality Concepts                                   | Ch. 14      |
|      | 5/2  | - Software Quality Assurance                         | Ch. 16      |
| 10   | 5/4  | - Review Techniques                                  | Ch. 15      |
|      | 5/9  | - Review Techniques                                  | Ch. 15      |
| 11   | 5/11 | - SW Testing Strategy                                | Ch. 17      |
|      | 5/16 | - Testing Conventional Applications                  | Ch. 18      |
| 12   | 5/18 | - Testing OO Applications                            | Ch. 19      |
|      | 5/23 | - Formal Modeling and Verification                   | Ch. 21      |
| 13   | 5/25 | - Software M&M - I                                   | Ch. 23      |
|      | 5/30 | - Software M&M - II                                  | Ch. 25      |
| 14   | 6/1  | - Maintenance & Re-Engineering                       | Ch. 29      |
|      | 6/6  | - <b>National Holiday (Memorial Day)</b>             |             |
| 15   | 6/8  | - Software Process Improvement                       | Ch. 30      |
|      | 6/13 | <b>EOSP(End-Of-Semester Presentation)</b>            |             |
| 16   | 6/15 | <b>FINAL EXAM</b>                                    |             |
|      | 6/21 |  |             |

*Above schedule is subject to change.*