

# Software Engineering

## CS335

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# Main Objectives

- Get to know what activities need to be carried out for software development in a systematic way
- Get to know how to carry out these activities in a systematic way
- Get to know what the systematic ways are
- Be able to apply theories into practices for software development

# Course outline

- Different Software Process Models or Software Development Models (systematic ways to develop software - engineering)
  - Including many phases/steps with respect to a specific order
    - What to do in each phase/step
    - How to do it
  - *Analysis* phase using analysis models
  - *Design* phase using design models
  - Implementation/programming
  - Software testing
- Software Project Management

# Labs and Marks

- Lecture times:
  - Monday 09:00 - 10:00 (12:00 - 13:00), 17:00-18:00
- Lab times:
  - Monday 1-3 **either**
  - Wednesday 4-6 Eolas building  
choosing the one suits your timetable
- Lab work:
  - 10 labs covering almost every aspect of SE.

# Labs and Marks (cont.)

- Lab grade : 30%
- Exam grade: 70%



# Contact Information:

Office: Room 135, Eolas Building

Time: 14:00 - 16:00, Tuesday.

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# References

- “Software Engineering”, Ian Sommerville, Pearson Publisher, 2011
- “Software Engineering – A Practitioner’s Approach”, Roger Pressman, McGraw-Hill
- “Requirements Analysis and System Design”, Leszek A. Maciaszek, Pearson Education, 2007
- “Requirements Engineering – Processes and Techniques”, Gerald Kotonya and Ian Sommerville, Wiley, 1998
- “Using UML, Software engineering with Objects and Components”, Perdita Stevens and Rob Pooley, Pearson Education, 2000