Lecturer:

A/Prof. Leszek Maciaszek

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Time and place (day-time offering):

Lectures:
Monday 18.05 - 21.55 E6A 102

References:

Principal reference material – Lecture Notes on the Web

Other readings:


Unit objectives:

The aim of this course unit is to examine the methods and tools of modern large-scale application software production. The unit explores the available technology and techniques of software development rather than the process, management, or social
implications (ref. TECH841). A related aim of the unit is to achieve a proficiency in using integrated CASE environments for application analysis, design and implementation.

**Assessment:**

**Project (40%):**

There will a project worth 40 marks during the semester.

**Final examination (60%)**

Students must perform satisfactorily in the final examination as well as in the project in order to pass.

**Software**

The unit involves the use of upper- and lower-engineering CASE tools covering the lifecycle of software development – from requirements determination via design and testing to defect and change management. The tools to be used in this offering of the unit are *Rational Suite* and *PowerDesigner*.

**Withdrawal**

The withdrawal dates for the first semester are:

*on or before 31 August:*

- **NE** - not effectively enrolled, no record on academic transcript, no HECS charge

*after 31 August:*

- **FW** - failure recorded, HECS paid
- **W** - withdrawal without penalty because of “unavoidable disruption”, W printed on the record, HECS paid

**Code of Behaviour**

The Code of Behaviour sets out our expectations concerning the use of the computing facilities. The University Council has approved a set of rules governing access to and the use of the University's computing facilities. Students who break them may be suspended from using the systems and, in serious cases, may be referred to the Discipline Committee of the University.

The rules set out the rights and, conversely, the responsibilities of all users of the facilities. In particular, they are based on the principle that the files in an account are the owner’s personal property and should be treated as such. Unauthorised use of someone else's account is a serious offence, whether it be copying their files (stealing), or changing them (damage), or merely gaining access to them (trespass). You will be expected to observe these rules and also any other regulations posted in the Department's laboratories.
**Special considerations:**

If *illness* or *misadventure* makes it impossible for you to sit the final examination, or interfere significantly with your performance in the exam, you are permitted to request "special consideration" (see the University Calendar).

To be eligible for such consideration, you are required to sit a special (supplementary) examination, and should note the following:

- If you are granted special consideration, we will require you to sit a *supplementary examination*. We will not consider your performance in the final examination at all in assessing your final grade.

- You must ensure that you are readily *available* to be contacted, and must hold yourself available to sit for the supplementary examination at short notice on the date and time we set. If you elect to be away from your contact address during the week of the special examination, and so cannot be contacted, or are unavailable to sit for the examination, your grade for this unit will be reported as FA.

- It is essential that you notify the *Registrar* in writing of your misadventure, accompanied by *documentary evidence*. If your application is the result of illness, your medical certificate should indicate the nature of the illness, and its effect on your ability to sit for or to perform in the examination.

- The purpose of any supplementary examination is to resolve the temporary difficulty caused by your illness or misadventure, and is not to give you an advantage over other students by allowing you extra time to study. We will, therefore, hold the special examination as soon as possible, and in determining your grade, we will take into account the possibility of *extra study time* available to you.

- As a *special consideration can only result in being granted a supplementary examination*, it is pointless to lodge the request if you do not intend to sit the special examination.
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<thead>
<tr>
<th>Week</th>
<th>Lectures</th>
<th>Assignments</th>
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| 1 Jul 24 | Software Process.  
Fundamentals of Object Technology. | |
| 2 July 31 | Fundamentals of Object Technology (cont.) | |
| 3 Aug 7 | Requirements Determination. | |
| 4 Aug 14 | Object State Modeling. | |
| 5 Aug 21 | Object Behaviour Modeling | |
| 6 Aug 28 | Advanced Class Modeling. | |
| 7 Sep 4 | Inheritance and Delegation Modeling. | Project Part A out |
| 8 Oct 9 | Revision. Exercises. | |
| 9 Oct 16 | Software Architecture. Collaboration. | Project Part A in |
| 10 Oct 23 | User Interface Design. | |
| 11 Oct 30 | Database Design. | Project Part B out |
| 12 Nov 6 | Program and Transaction Design. | |
| 13 Nov 13 | Testing and Change Management. | Project Part B in |