The Hebrew University of Jerusalem

Syllabus

Software Engineering - 67528

Last update 03-10-2019

<u>HU Credits:</u> 4

<u>Degree/Cycle:</u> 1st degree (Bachelor)

<u>Responsible Department:</u> Computer Sciences

<u>Academic year:</u> 0

<u>Semester:</u> 1st Semester

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> E. Safra

<u>Course/Module Coordinator:</u> Prof. Dror Feitelson

<u>Coordinator Email:</u> feit@cs.huji.ac.il

<u>Coordinator Office Hours:</u> Coordinate in advance

<u>Teaching Staff:</u>

Mr. Yigal Chen

Course/Module description:
  Software engineering deals mainly with the management of large-scale software projects, and not with the programming itself. This course will start with issues in advanced programming. Then we'll try to understand various aspects of software engineering, with emphasis on software lifecycle models. We'll learn about the Unified Rational Process and its use of UML, and compare it with agile methods and the development of open source software. In addition we'll consider software architectures, software testing, software evolution, software metrics, and human and social aspects of software development. We'll finish with a survey of monumental failures, and what can be done to avoid them.

Course/Module aims:
  See course description.

Learning outcomes - On successful completion of this module, students should be able to:
  Describe and compare lifecycle models of software projects.
Explain the difference between traditional and agile development approaches.
Recommend a development style suitable for a certain project's characteristics.
Develop models in UML.
Plan a comprehensive test plan.
Understand and appreciate the myriad factors influencing a software project.

Attendance requirements(%):
  85

Teaching arrangement and method of instruction: Lecture and exercises

Course/Module Content:
  See course description and course web site.

Required Reading:
 None.

Additional Reading Material:
  See course web site.

Course/Module evaluation:
End of year written/oral examination 70 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 30 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information:
  Course web site: http://www.cs.huji.ac.il/~engi