האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

Automata Infinite Objects - 67663

Last update 05-11-2018

HU Credits: *2*

Degree/Cycle: *2nd degree (Master)*

Responsible Department: *Computer Sciences*

Academic year: *0*

Semester: *2nd Semester*

Teaching Languages: *English and Hebrew*

Campus: *E. Safra*

Course/Module Coordinator: *Orna Kupferman*

Coordinator Email: *orna@cs.huji.ac.il*

Coordinator Office Hours: *Thu 9-10*

Teaching Staff:

Prof Orna Kupferman

Course/Module description:

Automata on infinite words, expressive power, different acceptance conditions, decision problems, applications in logic and reasoning about systems, automaota on infinite trees, a game-theoretic approach to tree automata, alternating automata, algorithms and applications.

Course/Module aims:

The students will learn about automata on infinite objects, realize the challenges that the transition to the model of infinite objects involve and will learn ways to cope with it.

Learning outcomes - On successful completion of this module, students should be able to:

Use automata on infinite objects for modelling on-going behaviors.

Attendance requirements(%):

0

Teaching arrangement and method of instruction: הרצאה ותרגילים

Course/Module Content:

Automata on infinite words, expressive power, different acceptance conditions, decision problems, applications in logic and reasoning about systems, automaota on infinite trees, a game-theoretic approach to tree automata, alternating automata, algorithms and applications.

Required Reading:

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Additional Reading Material:

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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:

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