COURSE DETAIL

AUTOMATA LOGIC AND GAMES
Country Israel
Host Institution Israel Institute of Technology, Technion/Neubauer
Program(s) Technion-Institute of Technology
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 107
UCEAP Course Suffix
UCEAP Official Title AUTOMATA LOGIC AND GAMES
UCEAP Transcript Title AUTOMATA LOGIC&GAME
UCEAP Quarter Units 3.00
UCEAP Semester Units 2.00

Course Description

This course covers automata over infinite words: acceptance conditions, expressiveness, algorithms, and constructions. Topics include translation between types of automata; temporal logic: linear temporal logic (LTL), monadic second-order logic (MSO), and the fragment S1S; translation between logics and automata; LTL model checking; games: infinite games on graphs; solving reachability, Buchi, and parity games; and LTL synthesis using parity games.

Language(s) of Instruction
English

Host Institution Course Number
236025

Host Institution Course Title
AUTOMATA LOGIC AND GAMES

Host Institution Course Details
https://www.graduate.technion.ac.il/Subjects.Eng/?Sub=236025

Host Institution Campus

Host Institution Faculty
Graduate School

Host Institution Degree
Joint

Host Institution Department
Computer Science

Course Last Reviewed
2021-2022

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