COURSE DETAIL

ALGORITHMS, GAMES, AND THE INTERNET

Country

Germany

Host Institution

Technical University Berlin

Program(s)

Technical University Berlin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics Computer Science

UCEAP Course Number

127

UCEAP Course Suffix

UCEAP Official Title

ALGORITHMS, GAMES, AND THE INTERNET

UCEAP Transcript Title

ALGORITHMS & GAMES

UCEAP Quarter Units

8.50

UCEAP Semester Units

5.70

Course Description

This course addresses theoretical problems at the interface of game theory and computer science, often inspired by internet applications such as sponsored search, crowdsourcing, and social computing platforms. Game theory studies strategic interactions of multiple agents in situations where the well-being of a single agent depends not only on the agent's own actions, but also on the actions of other agents. The course begins by discussing fundamental concepts from game theory and investigating algorithmic aspects of solution concepts. Then students analyze internetinspired algorithmic problems from a game-theoretic perspective.

Language(s) of Instruction

English

Host Institution Course Number

04347 L 260

Host Institution Course Title

ALGORITHMS, GAMES, AND THE INTERNET

Host Institution Campus

FAKULTÄT IV ELEKTROTECHNIK UND INFORMATIK

Host Institution Faculty

Host Institution Degree

Host Institution Department

Softwaretechnik und Theoretische Informatik

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