

COURSE DETAIL

MASTERING STRATEGY WITH GAME THEORY

Country

United Kingdom - England

Host Institution

London School of Economics

Program(s)

Summer at London School of Economics

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

125

UCEAP Course Suffix

S

UCEAP Official Title

MASTERING STRATEGY WITH GAME THEORY

UCEAP Transcript Title

GAME THEORY STRAT

UCEAP Quarter Units

5.50

UCEAP Semester Units

Course Description

This course introduces the science of strategic decision-making. Students learn to identify the key elements of any strategic situation: who the players are, what actions they can take, what information they have, and how they value different outcomes. Building on these foundations, students explore core concepts such as Nash equilibrium, the power of commitment, and the principles of effective mechanism design, all with minimal mathematical prerequisites but strong emphasis on conceptual insight.

The course moves from basic models to more sophisticated scenarios, each grounded in real-world applications. It examines how telecoms spectrum auctions raised billions, why Brexit negotiations unfolded as they did, how matching algorithms assign doctors to hospitals and support kidney exchanges, and how AI agents learn to interact strategically. Course outcomes include thinking more clearly and systematically about strategic situations in any context: equipping students with frameworks that are valuable across economics, business, politics, and technology.

Language(s) of Instruction

English

Host Institution Course Number

ME206

Host Institution Course Title

MASTERING STRATEGY WITH GAME THEORY

Host Institution Course Details

<https://www.lse.ac.uk/study-at-lse/summer-schools/summer-school/courses/research...>

Host Institution Campus**Host Institution Faculty**

Host Institution Degree
Host Institution Department Mathematics
Course Last Reviewed 2026-2027

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