



# Game Theory in Daily Life (TECS2741)

## Introduction

Game Theory exists in your daily life. This workshop covers both the conceptual foundations and practical application of game theory so that students can recognise these concepts, and apply game-theoretic analysis, both formally and intuitively, to negotiation and bargaining situations.

## Programme

Intermediate Course in Game Theory ([Token-required](#))

## Type / Level

## Instructor(s)

Dr. Stan HO

## Target



➤ S4 – S6 HKAGE student members

## Participants

➤ Class size: 30

## Medium of Instruction



Cantonese supplemented by English

## Certificate



**Certificate** will be awarded to participants who have:

- ❖ Attending **AT LEAST 4 sessions**
- ❖ Completed all the assignments with satisfactory performance

## Intended Learning Outcomes



Upon completion of the programme, participants should be able to:

1. critically analyse the concept of sequential games and simultaneous games in Game Theory;
2. compute pure and mixed strategy Nash equilibria in normal form games such as the famous example Battle of the Sexes and others encountered in daily life; and
3. solve perfect information games using backward induction

## Application Deadline

**12 May, 2014**

## Application Result Release Date

**16 May, 2014**

Student members may withdraw from the programme on or before the deadline. Otherwise, the token will be deducted.

**Screening Question:** Please answer the following question in the online application form.

Consider two people, John and Mary. They both enjoy each other's company, but neither can communicate with the other before deciding whether to stay at home (where they would not see each other) or go to the beach this afternoon (where they could see each other). Each prefers going to the beach to being at home, and prefers being with the other person rather than being apart. This game can be represented by the following normal form:

		Mary	
		Home	Beach
John	Home	(0,0)	(0,1)
	Beach	(1,0)	(2,2)

The number represents the utility of the two persons. Please state the decision of Mary and John with reasons provided.

## Schedule



Session	Date	Time	Venue (The HKAGE)
1	28 Jun	9:30 am – 12:30 pm	Room 305
2	5 Jul		Room 303
3	12 Jul		Room 303
4	19 Jul		Room 305
5	26 Jul		Room 305

## Enquiries



For enquiries, please contact Mr. LAU at 3940 0178 or Ms. LO at 3940 0191.