

Group Coursework

The Groups: For this coursework task you need to form a group of size 2 - 4 and produce a piece of work together. You may form your own group from anyone else taking the course that you wish. If you can't find a group or would prefer me to assign you to a group, then please email me (sb3710@ic.ac.uk) ASAP and I will assign groups from the students that have emailed me.

The Task: Using methods/techniques/motivation from the course, as well as from outside the course should you wish, **either:**

- (a). Perform an analysis of a particular game/strategic situation of your choice, **or**
- (b). Research and derive a result (which may be your own result) from game theory which has not been covered during the course.

Ensure that you emphasize the elements of your own work and/or understanding and clearly reference any sources of information that you use from outside of the course material.

The Submission: Your submission should take the form of **either:**

- (a). A short report or conference style paper (maximum length approximately 10 sides of latexed A4), **or**
- (b). A poster.

One group member should submit your groups work on Blackboard. Ensure that all group members names and CIDs are clearly written on the front of the report/top of the poster. The **deadline** for submission is at **1pm on Monday 9th December**.

Use of Programming: You are welcome to use programming as part of your work should you wish. You are free to use whatever language you wish and you may submit code as part of your submission (for example by providing a link to your GitHub where the code is saved) should you wish to do so. **Note well:** There is absolutely no pressure to do any programming in this course, this is merely included as an option for those that are interested in doing some programming as part of their work.

Use of AI Models: Use of AI is **permitted** on this coursework task should the use be to complement the work in some way. For example, a piece of work with heavy use of AI could be one that is playing games against the AI to discuss and analyse the current capabilities of the AI. AI may also be used for smaller tasks such as checking grammar or the like. The AI is **NOT** to be used to write your coursework for you. Where AI has been used in any way in your work, please clearly indicate how and where you have used it, perhaps with a statement before where you would naturally include your references.

Feedback and Grading: The coursework task is worth 10% of your overall grade for the module. All group members will receive the same grade for the submission, which will be an integer between 0 and 10 inclusive. This is an open ended piece of work which will therefore not, of course, have an exact mark scheme and will naturally be graded with some level of subjectivity. Nevertheless, care will be taken to grade all submissions thoroughly and fairly. The grading, albeit subjective, will be performed with the following guide in mind: supposing I am taking your work to be presented as a poster/report at an academic discussion/research group, then:

- 0 - 4: The work could not be presented; possibly it contains little to no game theory or makes significant errors. There may not be enough content produced.
- 5: The work would require significant modifications or perhaps reproducing entirely, to be presented; perhaps the work shows a basic understanding with little to no originality or deeper thought. The work may contain some errors.
- 6 - 7: The work would require some modifications to be presented; it shows an understanding of the material and an engagement with the task. Perhaps more could be done to deepen the work. The work may contain an occasional error.
- 8 - 9: The work is presentable with minor modifications; a clear showcase of understanding and engagement with the task. Minor improvements could be made.
- 10: The work is presentable as produced.

Feedback will be provided where the marker feels there is some useful or relevant advice/comments to be made.