

2024 IM²C Full Submission Guidelines

Teams may use any inanimate source of data, materials, computers, software, references, websites, books, etc. Be sure to credit all sources used.

Teams may not use any person (other than team members) to discuss or obtain ideas for solving their problem **nor may they seek help in obtaining an answer from the teams' advisor or anyone else**. Any team that discusses the problem with anyone in a position to supply them with information reflecting experience or professional expertise will be disqualified. The relevant issue is one of intent: each team of students is expected to develop all of its substantive analysis without the help of others.

Partial solutions are acceptable. There is no passing or failing cutoff score, nor will numerical scores be assigned. The IM²C judges are primarily interested in a teams' approach and methods.

The solution must consist entirely of written text and possibly figures, charts, or other written material only. No non paper support such as computer disks or applications will be accepted.

Each page of the solution should contain the team control number and the page number at the top of the page; we suggest using a page header on each page for example: Team # 2024000 page 6 of 13.

The names of the students, advisor, or institution must not appear on any page of the solution. The solution must not contain any identifying information other than the team Control Number.

Teams should keep in mind the following guidelines while preparing their solution papers:

- Conciseness and organization are extremely important. Key statements should present major ideas and results.
- Present a clarification or restatement of the problem as appropriate.
- Present a clear exposition of all variables, assumptions, and hypotheses.
- Present an analysis of the problem, motivating or justifying the modeling to be used.
- Include a design of the model. Discuss how the model could be tested.
- Discuss any apparent strengths or weaknesses to your model or approach.
- Incorporate lengthy derivations, computations, or illustrative examples in appendices. Summarize these in the main report. Results must be explicitly stated in the body of the report.

Your PDF solution should include:

- **One page Summary Sheet.**

The Audience for the summary sheet is anyone unfamiliar with the problem. Hence, in your own words briefly outline the problem, the main solution approach, and your conclusion.

To write a good summary, imagine that a reader may choose whether to read the body of the paper based on your summary. Thus, a summary should clearly describe your approach to the problem and, most prominently, what your most important conclusions were. The summary should inspire a reader to learn the details of your work. Your concise presentation of the summary should inspire a reader to learn the details of your work.

- **One page *Letter to the Decision Makers* with your recommendation.**

The audience is the Directors of the IMMC-A, a group that is interested in learning your recommendation for how potential pets should be matched with humans and why this will result in a positive change in the overall health of domesticated animals and people worldwide. They are already familiar with the problem (and have just read your Summary Sheet so don't restate or repeat this). Keep in mind that the purpose of the letter is to provide essential information to the decision makers, communicating key details of your full recommendation as stated in your solution paper.

- **One page Table of Contents.**

This allows the reader to easily find various parts of your solution, especially if they chose not to read though in order (as is typical when reading long reports).

- **Twenty-page (maximum) report** communicating the essential aspects of your solution.

- The specifications of a complete solution:

- A4, margins at least 1.5cm (OR) Letter, margins at least 0.6in
- Papers must be typed and in English.
- At least 12-point font size.
- **Note that (excluding references and appendices, see below) you have a maximum of 23 pages to communicate your solution.** Your summary sheet, letter to the decision makers and your table of contents all count towards the 23-page limit (excluding references and appendices) of your solution.

- **Reference List, Appendices, and AI Use Report.**

A list of references, any appendices, and the AI Use Report, **do not count** toward the 23-page limit and should appear after your completed solution. You should not make use of unauthorized images and materials whose use is restricted by copyright laws. Ensure you cite the sources of all ideas and materials (data, images, etc.) so it is clear to the reader what ideas and mathematical work was completed by your team and where you are building in ideas of others.