

COMPETITION REGULATIONS FOR MATHEMATICAL MODELING *INFINITICS 9*

TERMS AND CONDITIONS FOR PARTICIPANTS

1. The participants must be Senior High School students or on the same level when *INFINITICS 9* takes place.
2. Each participant is required to submit a scan of student ID card and a statement letter as an active student from their respective schools.
3. The Mathematical Modeling is to be done in **groups**. Each group consists of three students from the same school. Each school can only send a **maximum of three groups**.
4. Each participant can register for **only one** branch of competition in **one group**. Any participants who violate this rule will be immediately disqualified.
5. The registration will be open from **30th July 2025 to 20th September 2025**
6. The registration fee can be paid through **BCA (Wisma Asia branch) 0845063988** on behalf of **Yayasan Universitas Pelita Harapan**. If there is a mistake in the nominal transfer, the risk is borne by the participant.
 - a. Early Bird Period: **30th July 2025 to 15th August 2025**
The registration fee of **IDR 300,000.00 per group**;
 - b. Normal Period: **16th August to 20th September**
The registration fee of **IDR 350,000.00 per group**.
7. After making the payment, all participants must send the payment slip through *INFINITICS 9 website* (<https://www.infiniticsuph.com/>) with mail format based on the registration procedure.
8. Every participant must attend all events held by *INFINITICS 9's* committee. Participants who don't attend all events will be penalized. Further detail will be explained in the Technical Regulation.

The winner of Mathematical Modeling Competition will get the following prize.

- a. First Place : Rp. 3,000,000.00 + E-Certificates + Academic Scholarship for the Actuarial and Applied Mathematics Study Program at Pelita Harapan University for each participant in the group.
- b. Honorable Mention : Rp. 1,500,000.00 + E-Certificates
- c. Favourite : Rp. 750,000.00 + E-Certificates

MATHEMATICAL MODELING COMPETITION FORMAT

Mathematical Modeling Competition is a branch of *INFINITICS 9* competition that focuses on the ability to apply mathematics in order to solve real-life problems. This competition consists of two stages, which are the elimination stage and the final stage. The elimination stage will be held on **7th September 2025** until **11th October 2025** and online votes (via the *INFINITICS 9* official Instagram account [@infinitics](#)) will be open on **12th October 2025** until **19th October 2025**. The final stage will be held on **8th November 2025**.

Elimination Stage Format:

1. Each group must have one teacher to assist during the elimination stage. The teacher is chosen by each group with the condition that he/she must be from the same high school.
2. Each group is **not allowed** to ask for help other than the chosen teacher. If the committee finds a violation, that group will immediately be **disqualified**.
3. The teacher has the responsibility to assist the participants, give advice, prevent fraud, and be responsible if something happens that is beyond the control of the committee.
4. After completing the registration for every batch, each group will be given a topic with one problem that has been determined by the *INFINITICS 9*'s competition committee via email (infinitics@uph.edu). Email will be sent on **6th September 2025 at 09.00 (UTC+7)**.
5. Each group is required to create a poster and pre-paper based on the problem given by the committee and will take an oral examination with the judges based on the pre-paper that has been made.
6. Each group has **5 weeks** to finish up the poster and pre paper, starting from **7th September 2025** until **11th October 2025**.
7. Each group sends the poster and pre paper that has been finished during the **5 weeks** period to the email (infinitics@uph.edu).
8. Oral examination will be held online on **20th October 2025 until 25th October 2025**.

9. **Five groups with the highest scores** (pre paper and oral examination) will pass to the final stage. They will be announced by the committee via our website www.infiniticsuph.com, email (infinitics@uph.edu), and *INFINITICS 9* Instagram ([@infinitics](https://www.instagram.com/infinitics)) on **25th October 2025**.
10. Groups that pass to the final stage must revise the pre-paper based on the comments that are given by the judges and continue the pre paper into a complete paper within **5 working days**.

Final Stage Format:

1. All finalists are required to resubmit the pre-paper that has been continued (to be submitted to the committee in soft copy which will be sent via email) into a complete paper within **5 working days**, starting from **27th October 2025** until **31th October 2025**.
2. The final stage will be held onsite on **8th November 2025** at Universitas Pelita Harapan (UPH) Main Campus, Lippo Village.
3. The finalists will present their paper in front of the judges.
4. The finalist with **the highest total score** (paper and presentation) will be the winner of the Mathematical Modeling Competition.

TECHNICAL REGULATIONS

The participants must follow the entire codes of conduct set by the *INFINITICS 9* committee. These codes of conduct are applicable for **all stages** of *INFINITICS 9* Mathematical Modeling Competition. These codes of conduct are applied as follows:

1. Participants must read **all Technical Regulations** in order to understand the competition well. The committee is not responsible in case participants do not read all the technical regulations of the competition and miss important points.
2. Participants and the teacher are **required to sign** the code of conduct agreement form attached at the end of this technical regulation's section.
3. Participants are required to attend the **technical meeting** conducted by the *INFINITICS 9*'s committee on **August 29, 2025 at 16.00 (UTC+7)**..
4. Participants are required to wear uniforms (according to the provisions of their respective schools).
5. Before the oral examination day, participants are required to change their name on Zoom according to the guidelines (guidance will be provided). Else, the participant **cannot enter** the channel.
6. Participants must prepare **one** gadget (with a camera) for the oral examination.
7. Participants must join the **Zoom** meeting platform **10 minutes** before the oral examination begins. Participants who are late for a **maximum of 10 minutes** still can participate without additional time. If the tardiness exceeds 10 minutes, then the participant will immediately be disqualified.
8. Participants must complete the **re-registration process** before the competition starts by submitting a photocopy of their student ID.
9. Participants must wear the provided name tag throughout the *INFINITICS 9* event. Participants who violate this rule will receive a **warning**. If a participant receives **three warnings** from the committee, the participant and their group will be disqualified.

10. Participants must attend all events held by the *INFINITICS 9*'s committee. Participants who are late for more than **15 minutes** will have their points deducted by **5 points per individual** for every unattended event.
11. Participants must maintain calmness and orderliness throughout the competition.
12. All penalties in the form of point deduction will be applied at the end of the Mathematical Modeling Competition.
13. All judges' decisions **are absolute** and thus cannot be objected against, and there is no correspondence with the committee.
14. Other matters that have not been regulated or have not been sufficiently regulated in this code of conduct will be regulated later.

Elimination Stage (Poster)

The following is the Technical Regulation for the elimination stage (poster):

1. The problem will be sent via email (infinitics@uph.edu) to the participants on **September 6th, 2025 at 09:00 (UTC+7)**.
2. In the elimination stage, there is one topic with one problem regulated by the *INFINITICS 9*'s competition committee. The solution of the problem must be made in the form of a poster.
3. Each group is required to make a poster as a requirement to take part in *INFINITICS 9* Mathematical Modeling Competition.
4. Posters must be done in accordance with the regulations that have been given. Posters that do not comply with the regulations will not be graded.
5. Poster and pre paper must be submitted together no later than **October 11, 2025 at 23:59 (UTC+7)**.
6. Posters must be sent to the committee via email (infinitics@uph.edu) according to the email format and further details will be explained in the **Elimination Stage (Pre paper)**.
7. The committee will publish the posters sent by participants on *INFINITICS 9* Instagram ([@infinitics](https://www.instagram.com/infinitics)) on **October 12, 2025 at 12:00 (UTC+7)**.

8. The committee will open online votes from **October 12, 2025 at 12:00 (UTC+7)** until **October 19, 2025 at 15:59 (UTC+7)**. During this period, all Instagram users can give their votes in the form of likes to the posters. Every Instagram user can give likes for more than one poster.
9. Poster will be scored based on judge votes (85%) and public votes (15%).
10. Public votes that will be counted are votes from the poster published on *INFINITICS 9* Instagram (**@infinitics**).
11. Poster is done only for the selection of the favorite winner and has no effect on whether the group passes to the final stage or not.
12. Poster with **the highest score** (judge votes and public votes) will be chosen as Favorite Winner.
13. **The mathematical modeling posters** from each group will become **the property** of *INFINITICS*, so that *INFINITICS* has the right to use it again at a later time.

Elimination Stage (Pre-paper)

The following is the Technical Regulation for the elimination stage (pre-paper):

1. Each group is required to make a pre paper based on the problem given by the committee.
2. Pre-paper is made in one language only, that is, in accordance with the language used in the poster. The documents must be packaged in PDF format.
3. The pre paper must consist of at least the following parts:
 - Method / model that is used.
 - Calculation and solution of the model.
 - How to interpret the solution.
 - Page Number
 - Document resources and references.
4. The limitation of material that can be used is from basic to High School Mathematical Olympiad level and Elementary Statistics.
5. The pre paper must pass a maximum Turnitin limit of 30%.

6. Each participant from each group (including the teacher) must fill in the honesty form. The honesty form template will be sent by the committee together with the problem. The honesty form must be uploaded together with the poster and pre paper.
7. The honesty forms, posters, and pre-paper must be sent to *INFINITICS 9's* email (infinitics@uph.edu). The filled honesty form must be scanned.

The email format is as follows:

Email subject : MATHMODEL_(Registration Number)

Filename : HONESTYFORM_(Registration Number).pdf

POSTER_(Registration Number).png

PREPAPER_(Registration Number).pdf

Example:

Email subject : MATHMODEL_021

Filename : HONESTYFORM_021.pdf

POSTER_021.png

PREPAPER_021.pdf

8. The committee will send a confirmation email within 1x24 hours after receiving email containing honesty forms, posters, and pre-paper from participants.
9. Each group has **6 weeks** to create the poster and pre-paper, and must be submitted no later than **October 11, 2025 at 23:59 (UTC+7)**.
10. Late submission will get a penalty of **30 points**. Late submission limit is **October 12, 2025 at 23:59 (UTC+7)**.
11. If the tardiness exceeds the late submission limit, the group will be immediately **disqualified**.
12. Pre-paper must be sent to the committee via email (infinitics@uph.edu) according to the email format on point 7.
13. Oral examination will be held on **October 20 – 24, 2025** using Zoom platform where there will be **25 minutes** of question and answer about the submitted pre paper.
14. **Five groups with the highest scores** (pre-paper and oral examination) will pass to the final stage.

15. **The mathematical modeling pre-paper** from each group will become **the property** of *INFINITICS*, so that *INFINITICS* has the right to use it again at a later time.
16. The results of the elimination stage will be announced by the committee via website www.infiniticsuph.com, email (infinitics@uph.edu), and *INFINITICS 9* Instagram ([@infinitics](https://www.instagram.com/infinitics)) on **October 25, 2025 at 18:00 (UTC+7)**.
17. Participants who have questions or further information about technical regulation for this competition should contact the contact person listed in the registration procedure.

Final Stage

The following is the Technical Regulation for the final stage:

1. Each finalist must continue their pre paper until it becomes a complete paper and prepare a presentation file based on the problem within **5 working days**, starting from the day of the finalists' announcement (**October 26 – 31, 2025**).
2. The documents must be packaged in PDF format.
3. Things that must be in the paper are:
 - Present a clarification or restatement of the problem as appropriate.
 - Present a clear exposition of all variables and hypotheses.
 - State and justify reasonable assumptions that bear on the problem.
 - Present an analysis of the problem, or give reasons about the model used.
 - Initial processing of data (Data pre-processing / data cleaning).
 - Calculation steps in the form of diagrams that clearly describe the input, process, and output.
 - Discuss any apparent strengths or weaknesses to your model or approach.
 - Provide a conclusion and report results explicitly.
 - Page Number
 - Document resources and references.
4. The paper **must pass** a maximum Turnitin limit of 30%.
5. Soft Copy of documents are sent to *INFINITICS 9*'s email (infinitics@uph.edu) in the following format:

Email subject : MATHMODEL_(Registration Number)

Filename : PAPER_(Registration Number).pdf

PPT_(Registration Number).pdf

Example:

Email subject : MATHMODEL_021

Filename : PAPER_021.pdf

PPT_021.pdf

6. The soft copy of documents must be sent before **October 31, 2025 at 23:59 (UTC+7)**.
7. Late submission will get a penalty of **40 points**. Late submission limit is on **November 1, 2025 at 23:59 (UTC+7)**. If the tardiness exceeds the late submission limit, the group will be immediately **disqualified**.
8. The committee will send a confirmation email within 1x24 hours after receiving email containing softcopies of paper and presentation files from finalists.
9. All finalists must come to Universitas Pelita Harapan (UPH) Main Campus, Lippo Village on **November 8, 2025** to present their papers in front of the judges. Finalists who have finished the presentation can watch the other participants who are presenting.
10. Participants are required to wear uniforms (according to the provisions of their respective schools).
11. Each group **has to** bring their own presentation file.
12. Each group may explain their presentation either in Indonesian **or** English, but must remain consistent until the presentation ends.
13. Participants must arrive 30 minutes prior to the start of the competition to provide directions on presentation procedures and the order in which the group will present (will be determined randomly).
14. Each participant presented the results of the group's model **in turns**, so the presentation could be heard clearly by the judges.
15. Each group's **presentation duration** is **15 minutes**, while **the question-and-answer session** and **judge's response** is **15 minutes**.
16. The **mathematical modeling paper** from each group will become **the property** of

INFINITICS, so that *INFINITICS* has the right to use it again at a later time.

POSTER'S CONTENT REGULATIONS

The regulations are as follows:

1. Poster must be original from the **group's own work**, that has never been published in any competitions. Otherwise, the group will be immediately **disqualified**.
2. Poster must be **in accordance** with the **topics** given. The identity of each group member in the form of name, school, and registration number must be clearly stated.
3. Poster must be made in **one language** only, either in Indonesian or in English, and **must remain consistent**.
4. Poster size must be in **A4** paper size (maximum **10MB** file size in PNG format).
5. Poster **must not contain** anything offensive towards any ethnicity, religion, and race, pornography, and other things that are contrary to the norms and regulations applied in Indonesia.
6. Posters must have a title and the mathematical model that has been made.
7. Posters can have additional graphics, pictures, text, and so on depending on the participant's creativity.
8. The poster must contain *INFINITICS 9*, Mathematics Students Association, and Universitas Pelita Harapan logo, which will be sent by the committee via email. These logos must be placed at the top right corner of the poster.
9. Criteria for scoring are as follows:
 - a. Judge vote (50%)

Scaled from 1 to 10. Participants create posters by paying attention to the relationship between the topic and the modeling results, providing valid and complete information, the ideas provided through posters are original and creative.
 - b. Public vote (50%)

Scaled from 1 to 100. Posters must be made as attractive as possible to attract the people's attention to give their votes.

Example:



Participant's Name 1 / Registration Num 1
Participant's Name 2 / Registration Num 2
Participant's Name 3 / Registration Num 3

School's Name

PAPER'S CONTENT FORMAT

1. Text Format

- a. Font : Times New Roman, 12pt
- b. Spacing : 1.5 lines
- c. Spacing before : 0
- d. Spacing after : 0 pt
- e. Margin : 1" (top, bottom, left, right)
- f. Paper size : A4

2. Outlines

The paper must consist of at least the following sections:

- 1. Abstract
- 2. Table of Contents
- 3. Chapter I : Preface (max. 2 pages)
- 4. Chapter II : Content (max. 10 pages)
- 5. Chapter III : Conclusion (max. 2 pages)
- 6. Bibliography
- 7. Page Number

PARTICIPANT'S CODE OF CONDUCT AGREEMENT FORM

I, the undersigned below:

Full name :
School :
Email :
Phone number :

Stated that,

1. All judges' decisions **are absolute** and thus cannot be objected against, and there is no correspondence with the committee.
2. I have read and agree to obey / comply all the technical regulations / guidelines of the Mathematical Modeling Competition set by the *INFINITICS 9's* committee, that have been delivered both written and verbally in the technical regulations, technical meetings, and in competitions, and in case I violate any technical regulations / guidelines, I am willing to accept the consequences given by the *INFINITICS 9's* committee.
3. I am willing to prepare all the equipments required / needed during the competition.
4. I am committed to participate in the competition honestly and will not cheat in any form at every stage that I participate.

Thus, I make this statement with full awareness and responsibility without coercion from any party.

....., 2025



(.....)

TEACHER'S CODE OF CONDUCT AGREEMENT FORM

I, the undersigned below:

Full name :

School :

Email :

Phone number :

Stated that,

1. All judges' decisions **are absolute** and thus cannot be objected against, and there is no correspondence with the committee.
2. I have read and agree to obey / comply all the technical regulations / guidelines of the Mathematical Modeling Competition set by the *INFINITICS 9's* committee, that have been delivered both written and verbally in the technical regulations, technical meetings, and in competitions, and in case I violate technical regulations / guidelines, I am willing to accept the consequences given by the *INFINITICS 9's* committee.
3. I am willing to work with the committee to ensure that the competition is carried out honestly, without cheating from any party.

Thus, I make this statement with full awareness and responsibility without coercion from any party.

....., 2025



(.....)