

GUIDE BOOK DERRICK 2025



DERRICK
2025 Energy
Innovation
Action



MECHANICAL ESSAY COMPETITION

In Collaboration With:



Organized By:





BACKGROUND

International Mechanical Material Competition is a Matric2k25 scientific competition from aimed at students throughout Indonesia, with the aim of enabling them to express their ideas and research results that have been carried out to realize a vision and mission. This competition aims to foster **critical thinking, innovation, and awareness of real-world mechanical challenges** by encouraging participants to explore relevant topics such as energy systems, renewable technologies, manufacturing processes, and industrial design.

Participants are required to submit original essays that reflect **strong analytical skills, supported by scientific arguments and relevant data**. Through this competition, students are given a platform to express their **ideas, contribute to engineering discourse, and compete for prestigious awards**.

THEME

**Technological Breakthroughs in Energy:
Facilitating Sustainable Growth and Systemic
Energy Change**

VENUE, DATE AND STATUS

Competition Day

- Venue : Online via Zoom Cloud Meeting
- Date : 6th December 2025
- Status : Online



GENERAL RULES

- MATRIC 2025 Mechanical Essay Competition will be held ONLINE.
- MATRIC 2025 Mechanical Essay Competition participants must be undergraduate students
- Each team consists of members a maximum of 3 (three) members.
- Each team consists of members from the same university and one person can only become a member of one team.
- Scan Student Card for team leaders and members
- Every member of the team is only allowed joining in one team.
- Teams that have registered may not change members.
- MATRIC 2025 Mechanical Essay Competition consists the preliminary round and final round. The preliminary round is essay selection, and the final round is the final report and presentation.
- The essay must be related to the theme of MATRIC 2025 Mechanical Essay Competition.
- All submission files entered in the competition shall not have been previously published in a professional journal or have been used in other regional or international competition.
- All submission files should be written, submitted, and presented in formal English.
- All submission files and the submission of material for each round have to follow the given format.
- Presentation session will be closed presentation system.
- Plagiarism exceeding the specified limit is strictly prohibited. Submitted works must have a maximum similarity index of 10% and an AI-generated content probability below 5%. Any violation will result in immediate disqualification. Failure to obey the rules, format, or late submission may receive deductions of points or even disqualification.
- All participants should attend a technical meeting.



SUB-THEME

*Sustainable Environment
Alternative Energy Sources
Innovative Materials for Green Technology
Beneficial Energy Influence
Advancement of Renewable Energy infrastructure*

COMPETITION FORMAT

- *MATRIC 2025 Mechanical Essay Competition consists of a preliminary round and a final round. The preliminary round is the essay selection and the final round is the essay presentation.*
- *The top 10 selected essay will be informed by the committee via email and MATRIC 2025 Official Account Instagram.*
- *The top 5 selected essay will be allowed to proceed to the final round and need to be developed in a essay, and presentation.*
- *Judges may start evaluating the full paper after the submission date.*
- *In the final round, each team will be given a total of 50 minutes, consisting of 20 minutes for a presentation and 30 minutes for a Q&A session by judges.*



COMPETITION FORMAT

- The order of presentation will be determined by a random pool at the technical meeting. During the presentation, a timekeeper will be present to remind participants of the time limits.
- The full essay must be submitted in a pdf format on November 9th 2025, at 23.59 WIB (GMT +7) To matric2k24@gmail.com with the file name and email SUBJECT:

IMMC_MATRIC2025_ESSAY_TEAM NAME.pdf

- Presentation files must be submitted before November 5th 2025 To matric2k24@gmail.com with the file name and email SUBJECT:

IMMC_MATRIC2025_FINAL_TEAM NAME.pdf

- Each participant must follow the Instagram page [@matric2k25](https://www.instagram.com/matric2k25) and [@derrick2k25](https://www.instagram.com/derrick2k25), upload a twibbon to their respective Instagram account, tag [@matric2k25](https://www.instagram.com/matric2k25) and [@derrick2k25](https://www.instagram.com/derrick2k25) .
- Screenshot proof of point 10 can be uploaded to the registration link. The twibbon link and twibbon caption can be accessed at the following link :

<https://drive.google.com/drive/folders/1AkmyliglPTNGil37wrA0yoSBpYFHouCf>

- All rules and regulations for the MATRIC 2025 Mechanical Essay Competition may change at any time. The changes will be notified to all participants prior to the competition.
- All decisions taken by the judge are absolute and cannot be contested.
- Failure to comply with the rules may result in point deduction or disqualification.
- The result of the competition will be announced on MATRIC 2025 official Instagram account.



ESSAY FORMAT

- *Paper : A4*
- *Font Style : Times New Roman*
- *Font Size : 12*
- *Line Spacing : 1.15*
- *Left Margin : 4 cm*
- *Right, Bottom & Top Margin : 3 cm*
- *Alignment : Justified*

TITLE PAGE

- Title: Maximum 20 words, using capital letters, font size 14, should be expressive, appropriate to the problem being written and not open opportunities for multiple interpretations.
- The author's name, ID, and batch are written clearly below the title.

ABSTRACT

- The Abstract must cover the core of the entire discussion summarized into 250 words. Keywords are not included.

ORIGINALITY PAGE

- The originality page can be access at the following link :

<https://drive.google.com/drive/folders/1OonDELfAM4A96X3F5lW80aEN7GWnlfut>

ESSAY FORMAT

INTRODUCTION

- The introduction contains background as well as general opinion regarding a topic that will be raised accompanied by relevant and reliable data.
- The introduction contains an overview of the innovation, the idea in general as a solution to overcome the problem raised.

FILL

- The content or discussion explains the innovative idea in detail related to the problem topic raised.
- The content interprets the opinion or argument of a topic, the problem that is raised in detail.
- Content includes analysis of relevant data to support opinions on a problem topic.

CLOSING

- The closing contains recommendations, conclusions, and suggestions based on the problems raised and solutions that have been explained.
- Conclusions are made according to the analysis of the problem and answer the objectives.

ESSAY TEMPLATE:

https://drive.google.com/drive/folders/1P2E2ezNvk0DC4gPWXBd4uYKSI_Ope3vFY?usp=sharing



ESSAY FORMAT

BIBLIOGRAPHY

- Bibliography is written to provide information so that readers can easily find the sources mentioned.
- Writing a list of bibliography obtained from the internet, writing the website address.
- The bibliography is written using Harvard style.

BIODATA

- The participant's identity includes full name, date of birth, student identification number, email, phone number, place of birth, organizational experience, scientific work that has been done, and scientific awards that have been made achieved.

SUPPORTING ATTACHMENT

- Supporting attachments include data, information or documentation that supports the essay topic.

ADDITIONAL RULES

- The essay includes the title of essay, name, and email of the authors.
- The essay must consist of minimum 5 (three) pages and a maximum of 15 (five) pages (excluding the title page (cover), bibliography and attachments) with as many diagrams and supporting illustrations or data tables as necessary.
- University or institution names and logos are not allowed.
- The bibliography is written using Harvard style.



JUDGING CRITERIA

ORIGINALITY [20%]

- The essay you create must be original, not copy other people's essays, not a translation, or an adaptation. The manuscript has never been published in any media and is not currently involved in similar activities.

INNOVATE AND PROBLEM SOLVING [40%]

- The essay created contains innovative ideas in the sense that it contains new ideas that can be accepted by many people or can be recognized as something useful and has never existed before but has a theory.

SYSTEMATIC [25%]

- Essays are submitted in a clear, coherent form, and supported by reliable data or information and good and correct Indonesian grammar.

FORMAT SUITABILITY [15%]

- Essays must follow the format of the writing guide provided

TIME

- Tardiness of more than 5 minutes from schedule time may result in a penalty unless the lateness is the fault of the tournament officials.
- The clock used by the tournament official time and it is absolute.



REGISTRATION

1. Registration fee for MATRIC 2025 for **International Mechanical Material Competition** are :

- **Early Bird (9 – 17 Oktober):**
 - i. 100.000 IDR per Team for Domestic Students
 - ii. USD 7 per Team for International Students
- **Normal (18 – 24 Oktober):**
 - i. 125.000 IDR per Team for Domestic Students
 - ii. USD 8 per Team for International Students
- **Extend (25 – 26 Oktober):**
 - i. 150.000 IDR per Team for Domestic Students
 - ii. USD 10 per Team for International Students

2. The teams that are selected for the final round have to pay the remaining fees:

- **300.000 IDR per Team for Domestic Students**
- **USD 19 per Team for International Student**

3. Submit the payment receipt to the link that will be given via email after the announcement of preliminary round result and sent your payment through:

- **BNI 1408613699 (Muhammad Rehan)**
- **BRI 010701135855500 (Naila Adinda)**

**Please confirm your payment on this phone number
+62 823-4753-4198 (Muhammad Fathir)*

- *The final payment has to be paid before November 9th, 2025 at 23.59 WIB (GMT+7).*
- *Any remaining question, please ask to the contact person below.*

+62 823-4753-4198 (Muhammad Fathir)

KEY DATES

- Early Bird Registration : October 9th– October 17th, 2025
- Normal Registration : October 18th– October 24th, 2025
- Extend Registration : October 25th– October 26th, 2025
- Full Essay Submission : November 9th, 2025
- Annoucement Finalist : November 16th, 2025
- PPT Finalist Submission : November 30th, 2025
- Technical Meeting : December 5th, 2025
- Competition Day : December 6th, 2025
- Awarding Night : December 7th, 2025

PRIZES AND AWARDS

The winners of MATRIC 2025, **International Mechanical Material Competition** will be awarded money and certificates

<i>Champion</i>	Rp 2.000.000	Plaque	Merch
<i>1st Runner Up</i>	Rp 1.500.000	Plaque	Merch
<i>2nd Runner Up</i>	Rp 1.000.000	Plaque	Merch
<i>Best Presentation</i>	Rp 250.000	Merch	
<i>Best Idea</i>	Rp 250.000	Merch	

CONTACT PERSON

Muhammad Nizam Fahmi

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