IE COM 2024

Guidebook
Essay Competition

The 11th
IECOM
2024

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Preface

South East Asia has shown rapid economic growth in the past years. In the words of the Indonesian Bank Governor, Perry Warjiyo, on High-Level Seminar 2023 "ASEAN Matters-Epicentrum of Growth", this growth is considered high in comparison with other areas. He also added the economy's high resistance to the uncertainties that are faced. The promising atmosphere is highlighted in ASEAN Finance Ministers and Central Bank Governors Meeting (AFMGM) 2023 by bringing the theme ASEAN Matters: Epicentrum of Growth. Moreover, South East Asia's leaders encourage making efforts on development and recovery of economy and digitalization. The goal of this endeavor is to make ASEAN the world center of economic growth, especially with ASEAN's handful of advantages such as abundant natural resources and promising renewable energy sources.

The trail of this yellow brick road is still full of arduous obstacles. The adversities are related to economic, social, and digitalization inequalities. In social inequality, there is a huge gap between rural and urban areas regarding infrastructure and human resource aspects. This problem is also faced by other countries in Southeast Asia. Furthermore, from the digitalization aspect, there are only a few countries that have high internet penetration with others having a very significantly low.

Seizing ASEAN's opportunity, there is a necessity to overcome its stumbling blocks first and turn it to our stepping stones. With this in mind, there is a need in creating a sustainable industry. The sustainable industry will tackle the inequalities by focusing on developing and enhancing community life and human society. Being one of the top-notch organizations in the Industrial Engineering field, the Industrial Engineering Student Union of Bandung Institute of Technology, MTI ITB, zero in on getting involved in working on the problem.

As a piece of the action, MTI ITB bring this issue to IECOM (Industrial Engineering Competition) 2024 by taking the theme "Engineering Horizons: Empowering Communities through Sustainable Industrial Innovation"

IECOM aims to help students all over Southeast Asia to develop their knowledge and skills by learning, sharing, and generating solutions on how to help establish solutions in achieving a sustainable industry. To accomplish this, IECOM conducts two main events that consist of a competition and a grand summit that will provide an abundance of opportunities for students to grow and sharpen their skills.

Furthermore, IECOM serves as an opportunity for industry practitioners, governments, and industrial engineering communities to interact and collaborate on their ideas in the hope of bringing a positive impact to the industry and the world as a whole.

What is IECOM?

IECOM is an international competition in the industrial engineering field aimed at undergraduate students. Held every two years, IECOM is conducted and organized by the Industrial Engineering Student Union of Bandung Institute of Technology as known as MTI ITB. With over 10 years of experience, IECOM has been indented as a distinguished event with participants from sundry countries in South East Asia. In carrying out the 11th IECOM in 2024, we determined to exceed expectations and spark innovations.

Vision
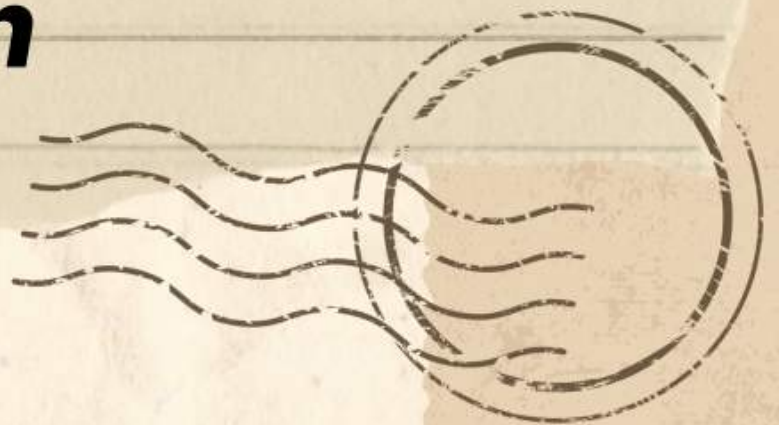
"IECOM as best practice of South East Asian Industrial Engineering Competition in Indonesia"

Mission

- Conduct an industrial engineering competition with highly relevant and innovative main topics on an international scale.
- Expand connection and networks of MTI and IE/EM ITB on a national and international scope.
- Provide the ultimate experience and opportunity for IECOM's participants to develop and enhance themselves.
- Create a delightful experience of managing a project for the committee team in self-development.
- Ensure and make the IECOM 2024 a project with the prospect of return value.
- Boost knowledge and awareness regarding prominent and relevant topics and issues with IE and EM.

This Year's Theme

Engineering Horizons: Empowering Communities through Sustainable Industrial Innovation

This Year's Theme

Why

Rapid ASEAN growth amidst inequalities in rural areas

In recent years, the countries of Southeast Asia have witnessed substantial economic progress, surpassing other regions and displaying remarkable resilience amidst global economic uncertainties. The ASEAN-5 nations, comprising Indonesia, Singapore, Malaysia, Thailand, and the Philippines, have achieved growth rates exceeding 5% and are anticipated to sustain this upward trajectory. Nevertheless, despite these encouraging developments, the region confronts persistent challenges concerning economic, social, and digital disparities. Income inequality is prevalent, and rural areas lag behind their urban counterparts regarding infrastructure and education. Additionally, digitalization remains uneven, with varying degrees of internet penetration. Through sustainable industrial innovation, these challenges can be effectively addressed while fostering inclusive economic growth, environmental preservation, and overall societal advancement.

What

Empowering communities through transformative innovation

This overarching theme addresses the issue of uneven human quality of life, particularly in remote or hinterlanda. "Engineering" refers to applying theoretical knowledge to solve problems with innovative and value-adding solutions. "Horizon" describes the perspective used in applying this engineering knowledge, with a long-term, exploratory view to expand the scope of its applications. The theme focuses on enhancing human quality of life by adding value through applying theoretical knowledge to community and social development. The aim is to prioritize environmental, social, and economic aspects in the development and progress, fostering sustainable and long-lasting innovations in technology, processes, and systems.

Competition Stage

Preliminary

The Preliminary Round is the first step of the IECOM competition. Participants will begin their journey with an online test that includes a variety of question types, including multiple choices, true/false statements, and short answer questions. This round is designed to assess your knowledge and understanding of industrial engineering and engineering management concepts. Your performance in this stage will determine whether you advance to the next round.

Simulation

In the Simulation Round, participants will be presented with a real-world industrial engineering case study, which they must work on the same day it is distributed. You will need to collaborate as a team to analyze the case, identify challenges, and propose viable solutions. This stage is conducted online, and its aim is to test your ability to apply your industrial engineering knowledge and problem-solving skills within a time-constrained environment. Those who successfully solve the case will proceed to the Amazing Race stage.

Amazing Race

The Amazing Race is the first offline competition stage in IECOM 2024 that takes participants on a journey to explore the six different laboratories available in the Industrial Engineering and Engineering Management Department at ITB. You will face a series of challenges and questions related to industrial engineering and engineering management concepts. Your goal is to navigate through the racecourse, solve the questions, and accumulate points. Successfully completing the Amazing Race is your ticket to the Grand Final, so teamwork and quick thinking are essential in this stage

Grand Final

Before the Grand Final, participants visit a company, where they receive a real-world case for the grand final stage. This visit offers practical insights and its application within a specific industry context. In the Grand Final, participants work on the case provided during the company visit. They must analyze, devise solutions, and present findings within a time limit, testing their ability to apply industrial engineering skills in a real-world scenario. The Grand Final determines the competition's overall winner.

Timeline

Registration

Early Bird: 20-31 October 2023
Regular: 1-21 November 2023

D-Day Preliminary Stage

25 November 2023

Preliminary Stage Announcement

1 December 2023

D-Day Simulation Stage

16 December 2023

Simulation Stage Announcement

XX December 2023

D-day Amazing Race

26 January 2024

Finalist Announcement

28 January 2024

Company Visit

29 January 2024

D-Day Grand Final

30 January 2024

Awarding Night

30 January 2024

Rules and Regulation

A. Competition Rules

1. Applicants should be currently enrolled university students, and this must be confirmed by presenting a valid student ID.
2. Students from universities across Southeast Asia are welcomed to participate.
3. Each team should consist of three members (can be from different universities), all of whom are pursuing a degree in Industrial Engineering or a related field.
4. Any member change in the team is not allowed once the team is registered.
5. Proficiency in the English language is required.
6. The IECOM 2024 committee reserves the right to disqualify participants who violate said rules.

B. Terms And Condition

1. The 11th IECOM 2024 will encompass a hybrid format, incorporating both online and offline activities across all its phases.
2. Those who make it to the Amazing Race stage must come to Bandung.

C. Registration Requirements

1. Each team has to sign up on IECOM 2024 website **iecom11th.com**.
2. One account is for one team and the account's name must be under the name of the team leader.
3. Go to the case competition registration menu on website.
4. In the registration menu, you will have to fill the form. In the form, each team must submit the team's name and team members' identity, including the submission of each members' student card in PDF format
5. Each member of the team must post twibbon (which can be accessed through **bit.ly/IECOMTwibbonPoster**) on their Instagram account and tag @IECOM2024 and 3 friends. The proof of twibbon upload must be attached in the registration form in JPG/PNG/PDF format

6. Each member of the team must post IECOM 2024 poster (which can be accessed through **bit.ly/IECOMTwibbonPoster**) on their Instagram story and tag @IECOM2024 and 3 friends. The proof of poster upload must be attached in the registration form in JPG/PNG/PDF form.
7. Each team must pay registration fee with these following requirements:
   Early Bird Registration:
   - National Students: **Rp300,000.00 or USD 20**
   - International Students: **Rp375,000.00 or USD 24**
   Normal Registration:
   - National Students: **Rp400,000.00 or USD 26**
   - International Students: **Rp450,000.00 or USD 29**
8. For those team who make it to Amazing Race stage must pay accommodation fee with these following requirements:
   National Students:
   - **Accommodation only**: Rp2,800,000.00 or USD179
   - **Accommodation and transportation to Bandung**: Rp4,000,000.00 or USD256
   International Students:
   - **Accommodation only**: Rp3,000,000.00 or USD192
9. All payment through this following bank account:
   Bank Name: Bank Central Asia
   Account Holder: Rafida Khairani
   Account Number: 2521497728
   Payment proof must be attached in the registration form in JPG/PNG/PDF format.
10. Questions regarding the competition can be asked through bit.ly/IECOM2024FAQ or
    Rachel:
    - **LINE ID:** raclid3
    - **Whatsapp:** 081295888559
    Raisa:
    - **LINE ID :** raisaadindasalsabila
    - **Whatsapp :** 081326491071

Prize

Case Competition

1st
USD 2000

3rd
USD 1000

2nd
USD 1500