Engineering Champs 2024

ADI Philippines Electronics Quiz Show

Dear Faculty and Students,

In the spirit of friendly competition, we are excited to invite you to join this year's Engineering Champs as part of Analog Devices Philippines Academe Expo. This in-person event promises to be an exhilarating competition that will bring together the brightest minds in the field of electronics engineering from universities across the region.

Details

- Date: October 1, 2024 (Tuesday)
- Time: 9:00 AM – 12:00 NN
- Venue: Analog Devices General Trias (ADGT), Building 4 Training Room
- Contact Person in Case of Questions:
  adxp@analog.com or
  Malcolm Kwok
  MalcolmLeeland.Kwok@analog.com

Mechanics

Eligibility and Registration

- Registration Form: Link
  Fill-in the form twice for two teams.
- Deadline of Registration: August 23, 2024
- The first 20 teams to register are allowed to join the Engineering Champs 2024.
- Maximum of 2 teams are allowed to represent a school/college/university. If more than 20 teams are registered, ADI maintains the right to omit an institution's second team to maximize the number of participating institutions.
- Each team can have a maximum of 4 members, where only 3 members are actively participating at each round. The 4th member or alternate can swap with one member during the 5-minute breaks between the three rounds. Each member of the team:
  - Should be a 2nd year to 4th year student enrolled in BS Electronics, Electrical, or Computer Engineering in the school/college/university being represented.
  - Should not have completed or graduated in any degree program
- Once the twenty teams are selected, an email will be sent on September 3, asking for the confirmed attendance of the teams. The teams should confirm their attendance on or before September 6.
- It is assumed that transportation of the teams going to/from ADGT are provided for by their institution.

Scope

The scope of the quiz are the following topics:

1. Engineering Math
   a. Probability and Statistics
   b. Differential Calculus
   c. Integral Calculus
   d. Differential Equations
   e. Advanced Math
2. Engineering Sciences
   a. Vector Analysis
   b. Electromagnetics
   c. Physics
3. DC & AC Circuits
4. Analog Electronics
5. Digital Electronics
6. Electronic Communications
7. Signal Processing
8. Feedback and Control Systems

Questions

- There will be three rounds namely the easy, average, and difficult rounds. The table below shows the number of questions and point system per round.

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Round	Number of Questions	Points
Easy	15	5
Average	15	10
Difficult	5	15

- The question bank is a mix of multiple choice, identification, and problem-solving questions.
- The time allocation per question will be announced before reading the question.
- The timer will start after the question is read twice.
- There will be a 5-minute break after each round, during which the teams may swap members.

Instructions On the Day of the Quiz Show

- By 9AM, all registered participating teams shall be at the assigned room.
    - A 10-minute grace period will be enforced after which no show teams will be automatically disqualified.
- The leaderboard will be shown during each break.
- For problem-solving questions, answers must be rounded off to 2 decimal places.
- A maximum of three (3) non-programmable calculators will be allowed for each team. Calculators will be checked before the start of the event.
    - We will follow the allowed calculators for the latest Electronics Engineering licensure exam. It is recommended to use Casio's fx-570 ES PLUS. Casio's fx-991EX is not allowed.
- No other references (e.g. reference books, notebooks, index cards, etc.) will be allowed during the quiz bee.
    - Any team with a member who is caught using references will be removed from the quiz bee and disqualified immediately.
- In case of a tie, a question will be randomly selected by the Panel of Judges from the question bank until the tie is broken.
    - The first team to get the correct answer wins the tie. Teams are allowed to submit their answers only once.
- Contention: After checking all the teams' answers, the quizmasters will give a short window for teams to appeal the preceding question. When the quizmasters start reading the next question, the teams may no longer appeal.
    - Only the representative of each team may raise any concern or clarification regarding their answers or other teams' answers.
    - All questions shall be raised in proper decorum (good manners). Any act by the participants derogatory to the Engineering Champs 2024 Committee, Board of Judges, and other participants shall be dealt with corresponding penalty.
    - The panel of judges consist of ADI Engineers. The decision of the panel of judges shall be final and irrevocable.
- The top three scorers will be ranked and awarded as the winners of the quiz bee. The prizes per team are listed below.

Rank	Prize
Champion	Medals + PHP 10k
1st Runner-Up	Medals + PHP 5k
2nd Runner-Up	Medals + PHP 3k

- The organizers reserve the right to modify the mechanics at any part of the program.
- For any inquiries ahead of the quiz bee, please email them to adxp@analog.com or MalcolmLeeland.Kwok@analog.com with subject line "*Engineering Champs Inquiry*".

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