ACADEME EXPO 2024

Theme: Creating Tomorrow's Possibilities

Registration Link: https://forms.office.com/r/rjNq7LECSm

DAY 1: September 30, 2024

Time	ADGT Training Center	
8:30 - 9:00 AM	Registration	
9:00 - 9:10 AM	Opening Ceremony	
9:10 - 10:20 AM	Plenary	
10:20 - 10:30 AM	Instructions for Paper & Demo Booths	
Time	**ADGT Auditorium**	**ADGT Training Center**
10:30 - 11:45 AM	Technical Paper Presentations	ADI Demo Booths Faculty Roundtable Discussion Student Project Demonstrations
11:45 - 12:45 PM	Lunch	
12:45 - 12:50 PM	Recap	ADI Demo Booths IC Layout Design Workshop Student Project Demonstrations
12:50 - 4:10 PM	Technical Paper Presentations	
4:10 - 4:30 PM	Wrap-up	

DAY 2: October 1, 2024

Time	ADGT Training Center	ADGT Auditorium
8:30 - 9:00 AM	Registration	
9:00 - 12:00PM	Engineering Champs ADI Phils Electronics Quiz Show	The Hackathon Challenge 2024: Sensing the real world!
12:00 - 12:45 PM	Lunch	
12:45 - 2:30PM	Analog Devices Campus Tour	
2:30 - 3:00 PM	Awarding Ceremony	
3:00 - 3:20 PM	Closing Ceremony	
3:00 - 4:30 PM	Socials	

ACADEME EXPO 2024
SUBMISSION OF EXTENDED ABSTRACT GUIDELINES

Open to College Undergraduates, Masters, & PhD Engineering

Eligibility:

1. Submission is open to BS, Masters, and PhD engineering (and engineering-related) students at Philippine Universities and Colleges.
2. Student/s **must** either be enrolled in the present academic year or have just graduated from half of the previous year and is/are not presently affiliated with or employed by any electronics or semiconductor company.
3. The paper **should** be endorsed by at least one full-time faculty member in the same university or college.
4. Entries **must** be a school project, thesis, dissertation, or other research to which the authors are major contributors. Papers presented in other conferences are also welcome.
5. The paper **should** showcase innovation and breakthrough in the field of electronics engineering. The topic of the paper can be, but is not limited to, any of the following:
    - Instrumentation and Control Systems
    - Mechatronics
    - Microcontroller Systems
    - Wireless Communications
    - Microelectronics
    - Biomedical electronics
    - Signal Processing and Algorithms
    - Cloud Computing
    - Machine Learning
    - Internet of Things (IoT)
    - Power electronics
    - Artificial Intelligence (AI)
6. The author(s) reserve(s) the right to have their work published in other conferences unless bound by prior Analog Devices Inc. Non-Disclosure Agreement (ADI NDA).
7. Maximum number of pages is **2**. **Papers with more than two pages will automatically be rejected.** Excluding recommendation letter and checklist.
8. Any non-compliance of the guidelines may be grounds for non-acceptance. If you there are any uncertainties for meeting any of the guidelines, please reach out to us through the email address provided below.

Submission:

1. Follow the attached template in writing the extended abstract.
2. All extended abstract submissions **must** include a recommendation letter from your school or department. The letter must indicate the status of your enrollment or date of graduation.
3. The final document **must** come in PDF format.
4. Entries **should** be submitted to **adxp@analog.com**, with a subject line *"ADXP 2024 Abstract - <Track>"*. For the *Track* section of the subject, refer to #5 in the Eligibility section. For example, *"ADXP 2024 Abstract - Mechatronics"*. For the topics that are not included in the list, indicate "*ADXP 2024 Abstract – Others"*.
5. All submissions are final. Revisions and corrections will not be accepted.
6. **Deadline of abstract submission is on 11:59PM of August 23, 2024.**

If you have inquiries or concerns, send us an email at **adxp@analog.com** with a subject line "ADXP Inquiries".

Criteria for Acceptance of the Extended Abstract (BS/Undergraduate):

Criteria	Description	Percentage

Novelty of work	• Mastery of the Idea/Concept
	• Unique contribution of your work
	  ○ Did you develop a new method for doing something?
	  ○ Did you find different results than others who have investigated the same thing?
	  ○ Did you demonstrate that something can be done that hasn't been shown before?
	  ○ Did you find a faster, simpler, or more accurate way of doing something that has been shown before?
	  ○ Did you discover something new and meaningful to other researchers and/or to practitioners?
	(In the template, it is Project Description section)
		25%

Quality of Work and technical feasibility of study	• Accuracy and credibility of data presented.
	• Likelihood of implementing/completing the project successfully.
	  ○ Is the solution practical to do?
	  ○ Working prototype, silicon results or equivalent of those results proving that the solution is feasible.
	(In the template, it is the Results and Conclusion section)
		35%

Paper Construction	• Logical flow of presentation
	• Idea/Concept clearly presented
	  ○ *(Overall flow of the extended abstract)*
	• Significance of study and how it is presented: It should determine who benefits from the study and how that specific audience will benefit from its findings.
	  ○ What problem does your idea is trying to solve?
	  ○ What significant scientific contribution is the study making to my field of research.
	  ○ *(In the template, it is the Background section)*
		40%

	TOTAL	**100%**

Important Dates:

Activity	Date
Deadline of submission of Extended Abstract AND Recommendation (Please see checklist attached in the template)	August 23, 2024 (11:59PM)
Announcement of Accepted Extended Abstracts and Demos	September 6, 2024 (9:00 AM)
Deadline for authors' confirmation of attendance	September 9, 2024 (11:59 PM)
Technical Paper Presentation	September 30, 2024

Writing Tips:

1. Before writing the extended abstract, ask yourself the following:
    - What results do I want to communicate?
    - How does my work improve on previously published work?
    - Who are the key players in this area?
    - What are the latest references?
2. Use simple sentences. Be as concise as possible and direct to the point.
    - Avoid using words like "Fastest", "Smallest", "Lowest power consumption", etc. Use quantitative words and accurate comparisons with earlier work.
3. Be explicit and concrete especially on your results and conclusion. Quantify the results.
    - The paper must convince the reviewer of the quality of the work.
4. Put your results in context. Compare them to the results of others if applicable. Refer those explicitly to the references.
5. Since the abstract only requires two pages, use appropriate images and/or visual aids strategically to reduce word count significantly.

Transportation & Accommodation:

1. The company will cover transportation for up to three (3) representatives for accepted technical papers coming from distant provinces.
2. The transportation covered includes round-trip airfare (if needed) and land transportation to and from Cavite.
3. Accommodation for the three (3) representatives will also be covered.
4. If there are more than three (3) representatives for the paper, the representatives will bear the associated costs.

Prizes:

This is your opportunity to gain recognition, connect with leading experts, and make your mark in the academic and professional community. See below for the prizes of winning papers.

Award	Prize
Best Paper	Plaque + PHP 30k
Best Paper Presenter	Plaque + PHP 10k

ACADEME EXPO 2024 ENGINEERING CHAMPS

ADI Philippines Electronics Quiz Show
Open to College Undergraduates

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 Center

Contact Person in Case of Questions: adxp@analog.com or MalcolmLeeland.Kwok@analog.com

Mechanics

Eligibility and Registration

Registration Form: https://forms.office.com/r/TmCAaWJJ4t
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:

a. Should be a 2nd year to 4th year student enrolled in BS Electronics, Electrical, or Computer Engineering in the school/college/university being represented.

b. 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.

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.

c. 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.

d. 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.

e. 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.

f. 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.

g. Only the representative of each team may raise any concern or clarification regarding their answers or other teams' answers.

h. 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.

i. 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*".

ACADEME EXPO 2024
IC Layout Design Workshop
Open to College Undergraduates

What to look forward?

- Hear from industry professionals as they share insights, trends, and real – world experiences.
- Learn the fundamentals of IC Layout and a sneak peek of how we start layout in ADI Philippines.
- Participate in creative activities where you will learn the basics of block layout flow and win exciting prizes!
- A chance to connect with fellow students and IC Layout professionals!

Registration Form:
https://forms.office.com/r/Hmr7xHLq6d

Workshop Details:

Date: September 30, 2024
Time: 12:45 PM to 4:10 PM
Participants: Targets 30 college students
Venue: ADGT B4 Training Center

Workshop Program:

Time	Program
12:45	Registration
1:00	Opening Presentation
1:30	IC Layout Presentation
2:15	Break
2:18	IC Layout Activity
3:48	Closing Presentation
4:08	Awarding and Photo Op

ACADEME EXPO 2024

The Hackathon Challenge 2024: Sensing the real world!

Open to Senior High School Students

What to look forward?

- Learn the technology of sensors through hands-on, electronics-aided experiments and demonstration.
- Deeper understanding of science textbook subjects by sensing any of the following real-world phenomena: humidity, UV light, ambient light, sound, air pressure, altitude, temperature, volatile organic compounds, acceleration, magnetism, and rotation.
- Collaboration to promote interactive application of technology thru scientific hands-on experiments and engagements with fellow students from different schools and engineering professionals.

Registration Form: https://forms.office.com/r/KFbdwBgqM2

Workshop Details:

Date: October 01, 2024
Time: 9:00 AM to 12:00 PM
Participants: Senior High School Students
Venue: ADGT Auditorium

Workshop Program:

Time	Program
8:45 AM	Registration
9:00 AM	Introduction
9:20 AM	Vizeey Application Tutorial
9:40 AM	Server Mode Tutorial
10:05 AM	Break
10:20 AM	Databot Sensors and Features
11:50 AM	Experiment Time
12:20 PM	Closing

Academe Expo 2024
STUDENT PROJECT DEMONSTRATION CONTEST
Open for College Undergraduates

The Student Project Demonstration event is an opportunity for schools to showcase their ingenuity and innovation through undergrad projects and research. Undergraduate students are encouraged to participate in this event which will be held on **September 30, 2024** at the Analog Devices General Trias (ADGT) Office. The Analog Devices Philippines hosts this competition as part of the Academe Expo 2024 event. Awards and prizes await the winning demo projects.

SUBMISSION GUIDELINES AND REQUIREMENTS

To participate in the student project demonstrations, fill out the **online application form**, https://forms.office.com/r/jjfEd1wiwX and submit your **Demo Pitch Video** *(maximum of 3 minutes)* and **Project Demonstration Proposal** *(see document template attached in the email)* at adxp@analog.com on or before **September 4, 2024**. See sample below:



(Note: For files larger than 25mb, please attach a link to download. Example: Google Drive)

Students, either individually or as a team (max of 4 members), can submit a project demonstration of their choice relevant to electronics, electrical, computer, software engineering or related disciplines. For teams with multiple students, only one student needs to fill out the application form. The filenames should also indicate the abbreviation of the submission title plus the school name. For example, the title, *"Power Module"*, would have a filename of *"PM_UST.mp4"* and *"PM_UST.docx"*. Please check the project demonstration proposal document template and demo pitch guidelines for further details.

The accepted project demonstrations will be notified by **September 16, 2024** through email together with the invitation and instructions for the live project demonstration.

On September 30, 2024, each team will be provided (free of cost) roughly two (2) 240x60 Table, one (1) 27" monitor, and one (1) extension wire with three (3) power outlets. It is recommended that teams demonstrate prototypes and utilize slides and/or videos (recorded at their home institution) to explain their demo to the audience and the judges. Accepted project

demonstrations are encouraged to prepare mini games of their choosing for additional audience engagements.

If you have concerns or clarifications, please email adxp@analog.com, Lyzek.Castillo@analog.com, or JericAdrian.Monzon@analog.com with the subject: ADXP_Demo_Question/Concern.

DEMO PITCH VIDEO GUIDELINES

The demo video pitch is your first opportunity to demonstrate the value of your project to the judges. The goal of the video pitch is to let the judges understand your project and allow them to see and feel how your project works. A good demo pitch should include details on how your project operates and its distinguishing features, how it will solve an existing engineering problem, and the specific benefits it will bring to the technical community and the world. You can be creative as much as you like and use necessary tools to deliver your demo pitch compellingly. The video pitch should be at maximum of 3 minutes time duration. The file format of the video should be in H.264 .mp4 1920x1080p resolution.

AWARDS AND PRIZES!

Each project demonstration will be evaluated by a panel of judges. The panel of judges will select the top project demonstrations based on originality/creativity, engineering design and innovation, value to practical applications, and video presentation. The top five (5) student project teams will be given the following awards:

- 1st Prize (a certificate and a cash award of 3,000 pesos)
- 2nd Prize (a certificate and a cash award of 1,500 pesos)
- 3rd Prize (a certificate and a cash award of 1,500 pesos)
- 4th Prize (a certificate and a cash award of 1,000 pesos)
- 5th Prize (a certificate and a cash award of 1,000 pesos)

Criteria for Judging:

- Originality/Creativity 25%
- Engineering Design and Innovation 30%
- Value to practical applications 30%
- Video presentation 15%