Republic of the Philippines
Department of Education
REGION VI – WESTERN VISAYAS
DIVISION OF ESCALANTE CITY

April 21, 2025

DEPED SDO-ESCALANTE 22 APR 2025 RELEASED

DIVISION MEMORANDUM
No. 247, s. 2025

Invitation for Mid-Year Convention 2025

TO: OIC-Assistant Schools Division Superintendent
Chief, Education Supervisor
Education Program Supervisors
Elementary and Secondary School Heads
All Others Concerned

1. The Mechatronics and Robotics Society of the Philippines (MRSP) is pleased to invite schools in the Midyear Convention, on June 17, 2025, at FEU Institute of Technology, Manila. This year's convention is themed "Innovating the Sustainable Future: The Role of AI in Automation, Robotics, and Mechatronics (ARM)".

2. The following are the suggested categories to be conducted during the said school's skill competition:
   a. Robotics
   b. Mechatronics
   c. AI Robot
   d. Internet of Things (IoT)
   e. Exhibit and Pitching Challenge
   f. Mobile Legends (5v5 Tournament)
   g. Drone Training and Competition

3. It is understood that in the conduct of this activity, there shall be no discrimination on account of age, gender, civil status, disability, religion, or other similar factors/personal circumstances that run counter to the principles of equal opportunity.

4. See the attached enclosure for the activities' criteria, facilitators, and invitation letter.

5. A registration amounting to ₱2800.00 per team and ₱1500.00 for teacher/coach will be charged against Local Funds subject to the usual accounting and auditing rules and regulations.

6. Immediate dissemination of this memorandum is desired.

PETER J. GALIMBA
Assistant Schools Division Superintendent
Officer-In-Charge
Office of the Schools Division Superintendent

Reference: none
Enclosure: As stated
Allotment: 1, 2, 3, 6, 7, 8, 9
To be indicated in the Perpetual Index under the following subjects
PROGRAMS/ACTIVITIES/PROJECTS SCIENCE CURRICULUM

FERNANDEZ/CID- 04/21/2025

Escalante City, Negros Occidental, Philippines
Tel. Nos – (034) 724-5720, (034) 454- 0746
escalante.city001@deped.gov.ph
depedescalantecity.weebly.com

MECHATRONICS AND ROBOTICS SOCIETY OF THE PHILIPPINES

April 10, 2025

Mr.Jesus V. Tabelino
Principal III
Escalante National High School
Brgy. Alimango, Escalante City, Negros Occidental

Subject: Invitation for Mid-Year Convention 2025

Dear Mr. Tabelino,

Greetings!

The Mechatronics and Robotics Society of the Philippines (MRSP) is pleased to invite you to our much-awaited Midyear Convention, happening on June 17, 2025, at FEU Institute of Technology, Manila. This year's convention is themed "Innovating the Sustainable Future: The Role of AI in Automation, Robotics, and Mechatronics (ARM)".

As we stand on the frontier of the Fourth Industrial Revolution, this convention aims to deepen our understanding of artificial intelligence and its transformative impact on the future of automation and intelligent systems.

- Highlights of the Convention
- Conference Program

Engage with thought leaders and experts as they share insights and developments on:

- AI-driven Workforce Reskilling: A Shared Responsibility
- Smart Mobility: AI's Contribution to Sustainable Planning
- AI-powered Public Infrastructure: Efficiency & Sustainability

Skills Competitions

Showcase your talent and ingenuity in the following exciting categories:

1. Robotics
2. Mechatronics
3. AI Robot
4. Internet of Things (IoT)
5. Exhibit and Pitching Challenge
6. Mobile Legends (5v5 Tournament)
7. Drone Training and Competition

MRSP

MECHATRONICS AND ROBOTICS SOCIETY OF THE PHILIPPINES

 Winners will represent the Philippines in an international drone competition in Singapore!

Registration Details & Mechanics

A summary of registration rates, including special early bird discounts, detailed competition mechanics, and prize packages, is attached to this letter for your guidance. **Please obtain your endorsement from the chapter to which your institution is affiliated**..

Whether you're a student, professional, or tech advocate, this event is a great opportunity to learn, network, compete, and inspire innovation in the field of mechatronics and robotics.

We encourage you to register early and help shape the future of smart technology in the Philippines.

Should you need further assistance, feel free to contact us at mrspevent@gmail.com or reach out through our official channels. Mobile No.: 09085978945

We look forward to seeing you there!

With sincere appreciation,

Engr. Rodeyn S. Tibon
Chair, Mid Year Convention
Mechatronics and Robotics Society of the Philippines

Dr. Arvin R. De La Cruz
National President
Mechatronics and Robotics Society of the Philippines, Inc.
National President

MIRDC-DOST Compound Gen. Santos Ave., Bicutan, Taguig City, Manila, Phils., 1631
Mobile no. 0908-5978945 ; Email: mrsp.ph.org@gmail.com
Website: www.mrsp-phil.org

MRSP MIDCON

ROBOTICS COMPETITION 2025

ONE ROBOT SHALL COMPLETE ALL EVENT

GENERAL ROBOT SPECIFICATIONS:

- **Size Limit:** 25cm length x 25cm width maximum. Allows folding of parts during measurement of size. No restrictions for height and weight.
- **Mobility:** Wheeled or tracked chassis for fast movement.
- **Power:** Use DC power enough to drive the robot till finish line.
- **The robot should have the following features:**

Line Tracing

- **Sensor Limit: Maximum of 3 IR sensors are allowed.**
- **Speed Control: No control in any way is allowed.**

Remote-Controlled

- **Remote Controlled (RC) Robot:** Any remote controller is allowed and not limited to RF or Bluetooth. Should only be connected to one controller
- **Pick-Up Actuator:** May or may not be included in the robot as long as it does not violate the size requirement. Any end effectors like claws, scoops, magnets, or suction mechanisms are allowed.

1-Minute Line Tracing Robot Competition

---

1. Objective

- Each robot must follow a predefined black line track on a white surface.
- The goal is to complete the track within 1 minute while following the line accurately.

2. Playfield Setup:

- **Arena Size:** 8 ft x 4 ft.
- **Track:** consists of black line with curves, sharp turns, intersections, and possible obstacles.
- **Length and complexity of the track:** was designed to allow skilled robots to finish within **1 minute.**
- **Checkpoints**: indicates restarting points in case the robot goes off track.
- **Obstacles (optional):** Barriers or ramps may be added to increase difficulty.

3. Game Rules

Start/Stop Phase:

1. The starting point is defined with a start sensor at the beginning of the cube sorting track.
2. The start sensor activates the timer. Each robot is timed until it reaches the finish line indicated by a stop sensor located after the block collection track. The maximum time, including block collection is 60 seconds.

3. Robots are placed at the starting line.
4. Countdown (3, 2, 1... GO!) – Robots should cross the start sensor and begin following the track.
5. **Live Timer:** The start sensor activates the timer. Each robot is timed until it reaches the finish line indicated by a stop sensor. The maximum time is 60 seconds.
6. **Score Calculation:** Based on completion time, penalties, and checkpoints. If the 60 seconds lapse, the referee will stop the robot and calculate penalties. The shortest time ranks higher.

Robot Rules & Limitations

- **Start Rules:** Once the robot is placed on the track, players are not allowed to hold or modify the robot except during checkpoint restart.
- **Restart Rules:** Robots should follow the off-track rules.

Scoring System

- **Completion Time:** The fastest robot (with the shortest recorded time) to finish the track within 1-minute wins.
- The track is comprised of checkpoints that the robot must sequentially complete.
- **Accuracy Penalty:** Deviating from the line or going off-track results in time penalties.
- **Checkpoints:** Every missed checkpoint adds 10 seconds (there are 4 checkpoints).
- **Penalty:** A penalty of 10 seconds will be added for every checkpoint missed after the 1-minute time lapse.
- **Off-Track:** If a robot goes off-track, the player will return it to the previous checkpoint to continue the task until the time expires. The referee will validate and approve the placement of the robot.

6. Winning Criteria

- The robot with the shortest time and least penalties win.
- In case of a tie, a rematch or sudden-death challenge can be held.

Remote-Controlled Cube Sorting Challenge

---

1. Objective

- Players must control their robot to pick up scattered colored cubes and place them in the correct colored bin within 1 minute.
- The player who sorts the cubes in the fastest time wins.

2. Playfield Setup:

- **Arena Size:** 8 ft x 4 ft.
- **Cubes:** 10 small colored cubes randomly scattered.
- **Target Bins/Printed Squares:** 4 separate printed squares, each assigned a specific color (Red, Blue, Green, Yellow).
- **Obstacles (optional):** Barriers or ramps may be added to increase difficulty.

3. Game Rules

Start/Stop Phase:

1. The starting point is defined with a start sensor at the beginning of the cube sorting track.
2. The start sensor activates the timer. Each robot is timed until it reaches the finish line indicated by a stop sensor located after the block collection track. The maximum time, including block collection track is 90 seconds.

Robot Rules & Limitations

3. **Start Rules:** Once the robot is placed on the track, players are not allowed to hold or modify the robot except during checkpoint restart.
4. **Restart Rules:** Robots should follow the off-track rules.
5. The robot must move the colored blocks and place them within the corresponding target-colored squares. It should not cross the outside perimeter of the target square.

Scoring System:

1. **Mismatched Cubes:** Cubes placed in the wrong colored square will incur a 10-second penalty.
2. **Unsorted Cubes:** Cubes outside the colored squares will incur a 5-second penalty.
3. The robot will be halted after the allotted 90-second time even if the robot has not crossed the next track.

Winning Criteria

- The robot with the shortest time and least penalties win.
- In case of a tie, a rematch or sudden-death challenge can be held.

Remote-Controlled Block Collection

Objective:

The robot shall be remotely controlled to navigate across the area to reach blocks and move the blocks to a target square.

Playfield Setup:

- **Arena Size:** 8 ft x 4 ft.
- **Cubes:** 6 small blocks are randomly scattered the playing field.
- **Target Bin/Printed Square:** Situated within the playing field where the blocks will be gathered.
- **Obstacles (optional):** Barriers or ramps may be added for challenge.

Game Rules:

1. The starting point is defined with a start sensor from the previous track.
2. The start sensor activates the timer. Each robot is timed until it reaches the finish line indicated by a stop sensor after the block collection game. The maximum time, including cube collection and sorting, is 90 seconds.

1. Players must use a single remote control to navigate the cubes.
2. The robot may move the blocks by pushing, picking and placing, grabbing, scooping, rotating, orienting, stacking, or arranging.
3. Only one player may drive the robot. Changing drivers will result in disqualification.
4. Blocks must be placed inside the target square to avoid penalties.

Scoring System

- The completion time will be recorded.
- Any blocks still held by the robot at the end will incur a 5-second penalty per block.
- A 5-second penalty will be applied for blocks outside the perimeter of the square.
- The robot will be halted after the allotted 90-second time even if the robot has not crossed the next track.

Winning Conditions

- The player with the **shortest recorded time wins**.
- In case of a tie, a rematch or sudden-death challenge can be held.

- The **overall winner** is determined from the total scores added from different tracks validated by the judges.
- **Tiebreaker:** a separate game will be conducted

General Tournament Rules

- The organizer has the right to apply penalties, disqualify, and dismiss any registered player at any stage of the tournament at their discretion.
- **Cheating:** Conspiring to cheat is already considered a violation and will result in automatic disqualification for all involved parties.
- **Accusations:** Reports must be made during the match to the game referee/marshals. Issues reported after the match ends will not be entertained.

Changes to Rules:

- Tournament Admin/Officials have the right to overrule any of the rules to prevent unfair advantage.

Organizer Rights:

- The organizer may overrule any of the rules based on the situation on a case-by-case basis. The organizer's decisions are final after the appeal process.

Final Right of Adjudication:

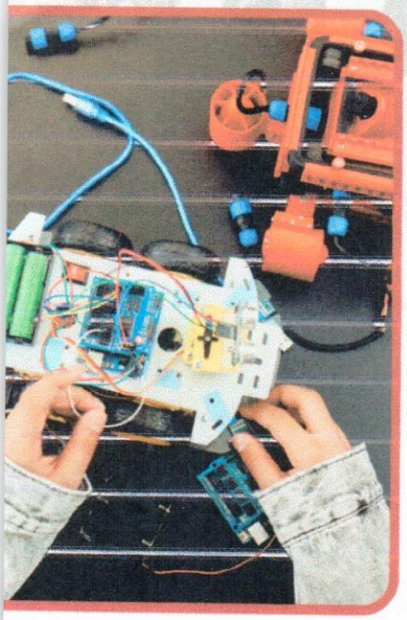
- The Organizing Committee reserves the right to amend or delete any content and retains final adjudication authority.

I hereby conform with the game mechanics above:
Team Coach

Signature over printed name

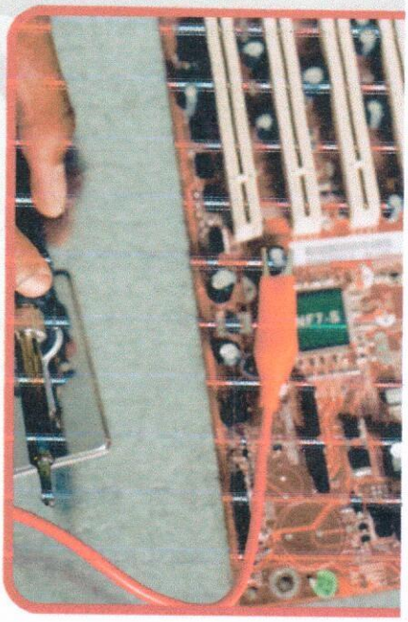
Date

This format ensures clarity, uniformity, and logical flow of information. Let me know if you'd like any more adjustments!



MRSP MID-YEAR CONVENTION 2025

JUNE 17 ▸▸▸▸ 8 AM - 5 PM



Innovating the Sustainable Future: The Role of AI in AUTOMATION ROBOTICS and MECHATRONICS (ARM)

Venue: FEU Institute of Technology – Manila

Convention REGISTRATION FEE

Scan the QR Code to register

Program Participants (Individual) (Foods, Reg Kits Included)	Early Bird	After May 10
Member	₱ 1,800	₱ 2,300
Non-member	₱ 2,500	₱ 3,000
Student Member	₱ 800	₱ 1,300
Student Non-member	₱ 1,200	₱ 1,700

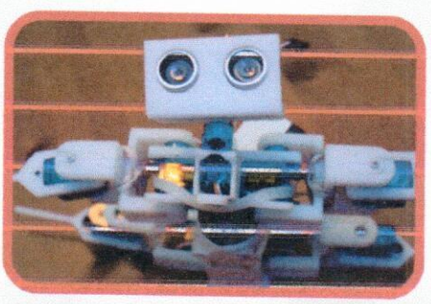
Skills Competition REGISTRATION FEE

Scan the QR Code to register

Competitions (2-3 pax/Team Registration) (Foods, Reg Kits excluded)	Early Bird	After May 10
Robotics	₱ 2,800	₱ 3,300
Mechatronics	₱ 4,000	₱ 4,500
IOT	₱ 2,800	₱ 3,300
AI in Robotics	₱ 3,000	₱ 3,500
Mobile Legend	₱ 3,000	₱ 3,500
Research Exhibit and Pitching Competition	₱ 2,000	₱ 2,500
DroneSoccer (Training & Competition)	₱ 6,300	₱ 6,800

Payment METHODS

Bank Name	China Banking Corp ADB Branch - Ortigas
Account Name	Mechatronics and Robotics Society of the Philippines, Inc.
Account Number	2120656918
Swift Code	CHBKPHMM
GCash Account	09085978945 / Jo Anne I.



MRSP

NEW MEMBERSHIP FEE 2025

Student

w/ inclusion of certificate

- Student 1 year: **PHP 300**
- Student 2 years: **PHP 500**
- Student 3 years: **PHP 700**

Professional

w/ inclusion of certificate

- Professional 2 years: **PHP 1,500**

Institutional

w/ inclusion of certificate/s

- Institutional 3 years: **PHP 10,000**

This includes 3 Professionals from the institution

**Same rate for renewal

Lifetime

w/ inclusion of certificate

- Lifetime Membership: **PHP 8,000**

Promotion Discount of PHP 6,800 Until June 30, 2025

With:
1. MRSP Lapel Pin
2. MRSP Polo Shirt

*ADDITIONAL PHP 250 FOR PRINTED ID

09085978945 | 88370431 to 38 loc. 474 mrsp.ph.org@gmail.com MRSP.2006