

neoxgen
class

Olympics 2025

Rule Book
Nexgen Olympics
2025



NEXGEN CLASS & TECHTREE

NexGenClass is an innovative online platform transforming education by equipping students with future-ready skills through engaging and accessible courses. With a focus on creativity, technology, and problem-solving, NexGenClass empowers students to become the innovators of tomorrow.

TechTree, the parent company of NexGenClass, extends this vision through immersive physical workshops. Together, NexGenClass and TechTree bridge the gap between digital learning and hands-on experiences, providing students with a holistic approach to education.

NEXGEN OLYMPICS 2025

NexGen Olympics 2025 is Pakistan's biggest future skills championship, designed for students from Grades 6–11. This two-day event is set to inspire young minds and provide a platform for innovation, entrepreneurship, and technical skills development. Hosted in collaboration with the National Incubation Center Karachi (NIC), the event promises an exciting lineup of competitions and activities.



Grades 6–11



National Incubation
Center– Karachi



17th & 18th
February 2025

Rule Book- Competition Guide

ROBO CHAMPS

Ready to see your Robots raze like lightning and score goals like ronaldo? Bring your robot to our competition for thrilling race and robo soccer championship

ROBO-SOCCER COMPETITION RULE BOOK

1. General Guidelines

Teams must maintain professional behavior at all times. Disruptive or disrespectful conduct will lead to penalties or disqualification.

Once turned on, the robot will compete against another robot. The robot scoring the greater number of points will be declared the winner.

Arduino-based kits (e.g., LEGO EV3, Spike Prime, M-Block) are allowed in this category.

All robots must pass an inspection prior to the competition. Robots exceeding size, weight, or voltage limits will be disqualified immediately.

2. Team Participation Rules

Each team can consist of a maximum of 2 members.

Once the robot starts, team members are not allowed to touch the robot during the match.

No outside or corner assistance is allowed during gameplay.

3. Robot Specifications, Power, and Control Regulations

Dimensions: The maximum robot dimensions are 1 ft x 1 ft (Length x Breadth). There are no restrictions on height.

Weight: The maximum weight of the robot is 1.5 kg.

Components: All components mounted on the robot will count towards its total size and weight.

Operation: Robots must include an accessible on/off button for operation.

Control: Robots can be controlled using Bluetooth, RC, or WiFi.

Power Supply:

The maximum supply voltage is 12V.

Power banks are allowed.

Power sources deemed dangerous or unsuitable by the judges will not be permitted.

Robots must be built to prevent any damage to the track or other robots.

4. Match Rules

Match Format:

Matches are played 1 vs. 1.

Each match lasts for 3 minutes. Semifinal and final matches may last 5 to 7 minutes.

Each team is allowed one time-out/freeze time of up to 1 minute per match.

Sides will be changed after half-time.

In case of a draw, the team scoring the first goal during extended time will qualify.

5. Disqualification and Fair Play Rules

Teams will be disqualified for the following reasons:

Attempting to damage the game field or other robots.

Dragging the robot during any part of the match.

Engaging in behavior that violates the spirit of fair play.

6. Scoring Criteria

Each goal scored by a team by rolling the ball into the opponent's goal will fetch the team 1 point.

The ball can be kicked, dragged, or pushed by the robot to score a goal.

In case of a jam-up of robots for more than 10 seconds, the robots will have to kick off again at the order of the referee.

The team with the greater number of points after the round ends will be considered the winner.

7. Timeline

Registration Last Date: 10th February 2025

Preliminary Round: 17th February 2025

Final Round and Result Announcement: 18th February 2025

8. FAQs

Q: Who can participate in the competition?

A: The competition is open to students who meet the registration requirements. Each team can consist of up to 2 members.

Q: Is there a participation fee?

A: No, participation in the competition is free of charge.

Q: Can we bring our own robots?

A: Yes, participants must build and bring their own robots that comply with the specifications mentioned in the rule book.

Q: What happens if our robot malfunctions during a match?

A: If a robot malfunctions, teams can use their one time-out to attempt repairs. Further malfunctions may lead to forfeiture of the match.

Q: Are there any restrictions on the materials used for the robot?

A: No specific restrictions, but all components must fit within the size and weight limits.

Q: Can we reconfigure or repair our robot between matches?

A: Yes, as long as the changes do not violate the competition rules.

Q: What tools and power sources are allowed?

A: Robots can use up to 12V power sources. Power banks are allowed, but any unsafe or non-compliant power sources will be disqualified.

Q: How will ties be resolved?

A: In the event of a draw, extended time will be played. The team scoring the first goal during this time will qualify.

Q: What kind of ball will be used in the matches?

A: A standard lightweight ball, approved by the organizers, will be used.

Contact Information

For any queries, contact the event coordinator at **0316 4998733**.

Robo Race Competition Rule Book

1. Introduction

The Robo Race Competition is an exciting challenge designed for students in grades 6–10. Participants will design, build, and program an Arduino-based robot to autonomously complete a racing track while avoiding obstacles and optimizing speed. The competition aims to foster STEM learning, problem-solving, and teamwork skills.

2. Team Composition

- Each team must consist of 2 students.
- Each team must have one mentor or teacher for guidance.
- Only one robot per team is allowed.

3. Robot Specifications

- Platform: The robot must be Arduino-based.
- Dimensions: Maximum dimensions are 25 cm (L) x 20 cm (W) x 15 cm (H).
- Weight: Maximum weight is 1.5 kg.
- Allowed Components: Arduino boards, motors, sensors (e.g., IR, ultrasonic), and batteries (max 12V).
- Prohibited Materials: Hazardous or destructive materials are strictly not allowed.

4. Track Specifications

- Surface: The track will be a smooth, flat surface with black lines marking the path.
- Obstacles: Ramps, speed bumps, and barriers will be placed along the track.
- Length: Track length will range from 5 to 10 meters.
- Width: Track width will range from 40 to 60 cm.

5. Competition Rules

- Each team gets two attempts to complete the race, and the best time will be considered.
- The robot must start from the designated starting zone and autonomously reach the finish line.
- **Time penalties will be applied for:**
 - o Deviation from the track: +5 seconds
 - o Collision with obstacles: +3 seconds per collision
 - o Human intervention: Disqualification in that round
- If the robot fails to move within 10 seconds, the attempt is forfeited.
- If the robot gets stuck, the team can request a restart with a penalty of +10 seconds.

6. Scoring & Judging

- The winner is determined based on the fastest time after penalties are applied.
- Bonus Points: Teams may earn +5 points for innovative robot design.
- Judges' decisions are final and binding.

7. Safety & Fair Play

- All robots must pass an inspection before the race.
- External interference with other robots is strictly prohibited.
- Misconduct or rule violations may result in disqualification.

8. Timeline

1. Registration Last Date: 10th February 2025
2. Preliminary Round: 17th February 2025
3. Final Round and Result Announcement: 18th February 2025

9. FAQs

Q: Who can participate in the competition?

A: The competition is open to students in grades 6 through 10. Each team must consist of two members and a mentor.

Q: Is there a participation fee?

A: No, participation in the competition is free of charge.

Q: Can we use pre-built robots?

A: No, participants must design and build their robots from scratch.

Q: What happens if our robot malfunctions during the race?

A: Teams can request one restart with a penalty of +10 seconds. Further malfunctions may lead to forfeiture of the attempt.

Q: Are there any restrictions on materials used for the robot?

A: Hazardous or destructive materials are strictly prohibited. Robots must also comply with size and weight restrictions.

Q: Can we modify our robot between attempts?

A: Yes, modifications are allowed between attempts as long as they adhere to the competition rules.

Q: How will ties be resolved?

A: In case of a tie, the robot with the least time penalties will be declared the winner.

Q: Can we use any software to program our robots?

A: Yes, any software compatible with Arduino boards is allowed.

Q: Will power supplies be provided?

A: No, teams must bring their own batteries and ensure they meet the voltage specifications.

Contact Information

For any queries, contact the event coordinator at [0316 4998733](tel:03164998733).

Thank you!



neoxgen
class

Contact

Phone +923164998733

Website www.techtree.io | www.nexgenolympics.com

Email info@techtree.io

Address B-228, Block -10, Gulshan-e-Iqbal,
Karachi