



**IEEE Region 3 SoutheastCon
Student Hardware Competition**
Guidelines



1. About the Competition

A student-centered program focused on giving college students a unique and exciting learning opportunity with robotics. Each year, teams take on a new game where they design, build, test, and program a fully Autonomous Robot to perform a series of tasks. The competition is held during the IEEE SoutheastCon.

1.1. Overview

The IEEE SoutheastCon 2024 Hardware Competition is open to student teams from universities within Region 3. Each student branch is allowed to send one team to the main competition bracket, but universities can also send additional teams for the open bracket. All team members must be registered for SoutheastCon by the start of the competition.



1.2. Purpose/Objectives

N/A

1.3. Format

The competition will have 3 rounds (qualifying, semi-final, and finals). A lineup of time slots and team call orders will be provided and posted to the SoutheastCon website prior to the competition date. For qualifying and semi-final rounds, two boards will conduct runs simultaneously in 5- minute intervals. The final round will be held on Saturday night during the awards banquet on a single board.



2. Rules and Regulations

2.1. Eligibility

- This competition falls under the Region 3 Student Activities Committee Student Competition Policy.
- There is no limit on team size for the participating team, but each team member should be a member of the same institution's student branch, and they must all be IEEE Region 3 student members.
- Only one team per institution's student branch is allowed in the main competition, referred to as Main category. This team is referred to as the Main Team.
- Teams that do not fit this qualification (additional teams in the student branch beyond the one allowed in the main competition, teams including students from other regions, hobby groups, or non-students, or the robots are not associated with the institution student branch) may compete in the Open category, but all team members must be IEEE members.
- Each section may have zero or more Open Teams.



2.2. Guidelines

Discord will be used for responses to questions and clarifications to participants. A Discord for the 2024 competition will be available just after the end of the year's SoutheastCon conference. Official Student Hardware Competition rules will be posted **ONLY** on the conference website (<https://ieeesoutheastcon.org>) under the Student Competition tab.



2.3. Submission Requirements

Please be ready to provide the following information during the check-in period before the competitions begin:

- **Team Name:** Each team will need to provide the name of their team as it is registered for the competition.
- **Team Members:** A list of all team members who will be present at the competition should be provided, including their full names and contact information.
- **Robot Description:** Teams will need to provide a brief description of their robot, including its dimensions, weight, and any special features or functions.
- **Robot Safety:** Teams are required to have a robot safety inspection the night prior, and can be inspected again the day of the competition.
- **Technical Inspection:** Teams may need to complete a technical inspection to ensure that their robot meets all technical requirements and is eligible to participate in the competition.
- **Consent and Release Forms:** Each team member and/or their legal guardian may be required to sign a consent and release form, which typically includes information about the risks.



2.4. Timeline

Differs each year.

2.5. Judging Criteria

The judging rubric will be defined based on the theme of the competition each year. Samples can be found in the competition guide linked above.

Disqualifications may be made by mutual consent of the judging panel and Head Judge. Causes include but are not limited to, unethical behavior during the competition and academic dishonesty.



3. Logistics

3.1. Registration Process

Competition registrations happens through a Google form in the format of this [Team Registration Form](#).

There are two registrations that students need to be aware of; conference registration and competition registration. All students competing in student competitions must register for both the conference and the competition. Information for both registrations is as follows:

- Conference registration (i.e. IEEE SoutheastCon registration)
 - Each member must register for the conference registration.
- Student Hardware Competition Registration
 - There are no fees for students to register for this competition (aside from the costs for students to register for the conference).



3.2. Location

The competition will be held on-site at the SoutheastCon.

Onsite Student Competition participant (one per branch) at \$50/day, 2.5 days maximum. Further details on funding support can be found at <https://ieeesoutheastcon.org/travel-and-funding-support/>.

3.3. Requirements

3.3.1. General Safety

To ensure the safety of all participants and spectators in the robot competition, the following safety guidelines must be strictly observed:

- The robot must not pose any danger to the judges, spectators, the playing arena, or the surrounding area.
- In the event that the judges determine that the robot is causing or is likely to cause harm, the match will be terminated immediately.



3.3.1. General Safety

- The judge retains the discretion to determine whether any points should be awarded for the match and whether the robot is allowed to continue participating in any remaining matches. Adherence to these safety guidelines is of paramount importance to ensure the safety of all involved in the robot competition.

3.3.2. Competition Grounds

The IEEE SoutheastCon Hardware Competition Chair is the lead for the design, development, testing, and analysis of the arena, robot requirements, and competition rules. An SB hardware team is the local branch for the Orlando hardware competition. The local branch is part of the team for building and testing, the arena prior to the competition. The local branch will support the operations of the competition during the competition.

3.4. Awards

This competition will have a first-, second-, and third-place winner.

