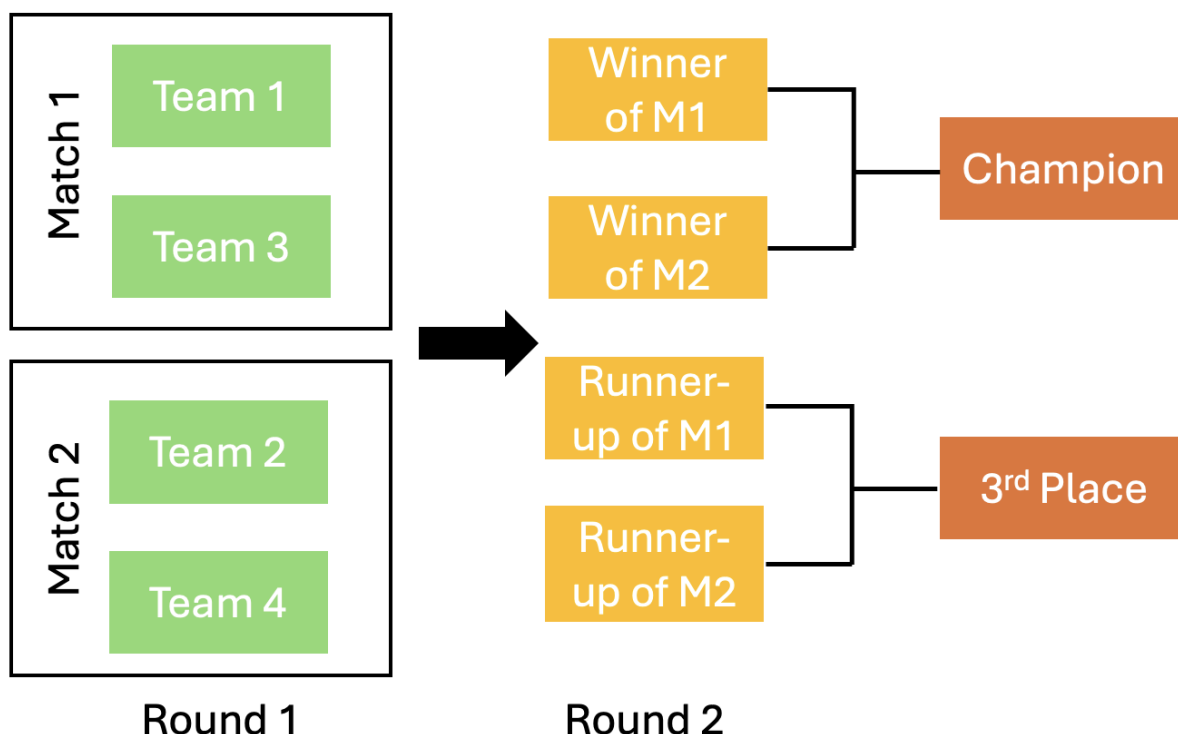


Tournament Procedure and Rubric

- The microphone and laser can be placed at any distance. We will provide three [DC power supplies](#) for each attacker-defender group.
- In the demo day (Nov 24), each team's demo needs to include the three voice commands that will be used in the tournament. Teams also need to present all the defenses used by their systems to make the attack-defense games in the tournament "white-box".
- Each team picks three functional commands, with one command containing DTMF tones. If you use another authentication command as a defense, that authentication command is considered part of the three functional commands.
- All defenses need to be able to be turned off. Otherwise, the attackers win automatically.
- The two teams flip a coin to decide which team will be the attacker first.
- When there is a tie in the scores, the team that uses a shorter time to finish their attacks win. If still a tie (neither team finished their attacks), then flip a coin to decide the winner.

In the lecture on December 4, we will have two first-round games and two second-round games. The two first-round games will run in parallel, followed by the two second-round games running sequentially, each refereed by the instructor and the GSI respectively.



For each attacker-defender pair (5 min setup time + 25 min testing)

Both teams will be attacking each other's systems simultaneously. Therefore, please make sure to coordinate within your group so that at least one member is responsible for attacking the opponent's system while another member operates the defenses on your own system.

Step 1: Defenders interact with their own systems when defenses are turned ON one by one.

- 4 min maximum.
- 1 pt for each command to the defender

Step 2: Attackers inject laser into defenders' systems when all defenses are turned OFF.

- 5 min maximum
- 1 pt for each command to the attacker

Step 3: Attackers inject laser into defenders' systems when defenses are turned ON one by one.

- 8 min maximum
- 2 pt for each command to the attacker
- Note: PIN and any other authentications are counted as defenses.

Step 4: Attackers inject other potential physical signals (e.g., EM, ultrasound, etc) into defenders' systems when defenses are turned ON one by one.

- 8 min maximum
- 2 pt for each command to the attacker

Update Log

- **Dec 1, 2025:** Changed the attack distance from 20cm to any arbitrary distance.
- **Nov 24, 2025:** Changed first-round competition format from *sequential* to *parallel*.
- **Nov 24, 2025:** Modified defense requirement from "*turn on all defenses*" to "*turn on defenses one by one.*"
- **Nov 24, 2025:** Updated time allocation for each attacker-defender pair.