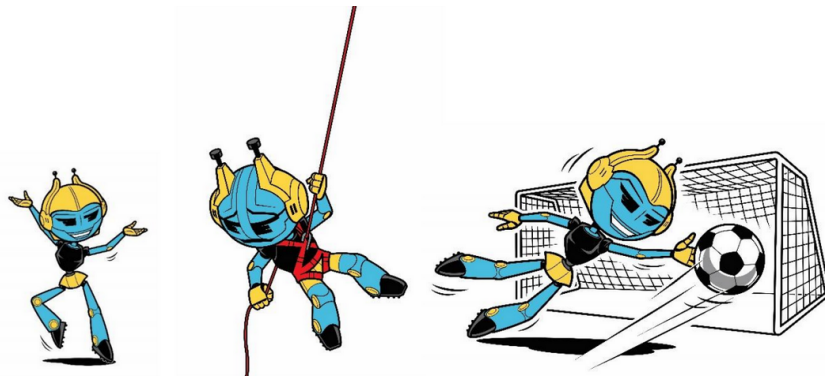




Queensland State Championships Queensland Nationals Hub

*UQ Centre, St Lucia, Brisbane QLD
9th & 10th October, 2021*



Information Pack

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Mission Statement and Objectives

Mission Statement

RoboCup Junior Queensland aspires to be a popular educational activity of excellence. During the 20th century, science and technology have made exponential strides into the bettering of people's lives, but at the same time left many problems to solve. By taking a fresh look at robots as an educational and entertaining medium, it is hoped that RoboCup Junior Queensland will contribute to the development of 21st century society.

In 2021 the committee is excited to be hosting the Queensland Championships at the UQ Centre. The Queensland championships have been growing each year, based on the feedback and advice delivered by competitors, volunteers, teachers and parents that attend.

Due to the ongoing COVID-19 situation preventing interstate travel, we are excited to host our Queensland National Hub alongside our State competition. Teams wishing to compete at the National Virtual competition will be welcome to challenge themselves at both the State and National level over the weekend. We hope that competitors will have an enjoyable and collaborative experience and learn from the different robot designs around them.

After the August lockdown prevented our planned State competition we look forward to seeing you over the weekend of 9th and 10th of October. Please don't hesitate to contact us if you have any questions.

Alexander (Sandy) Bush

RoboCup Junior Queensland Co-President

Margaux Edwards

RoboCup Junior Queensland Co-President

RoboCup Junior Australia Objectives

1. To encourage young people to take an interest in scientific and technological fields, to cultivate their interest through robotic competitions through hands-on creation.
2. RoboCupJunior Australia will help young people to expand their social, intellectual and problem-solving skills, helping them to develop into creative and independent adults.
3. To provide a forum, which will allow more people to appreciate the coexistence between science, technology and humankind.
4. To create an environment that will encourage people from all over the world to share their experience with science and technology, thereby contributing to its development.
5. To use robotics as a vehicle to foster the development of an internationally based intellectual cooperative.
6. The emphasis will be on learning and enjoyment rather than competing to win.
7. Participants will be required to share technological developments in order to ensure the improved quality of the competition rather than allow an individual team's dominance.
8. RoboCup Junior Australia is an educational activity, which will nurture understanding between different nationalities via the opportunity to compete in an educational robotics competition.
9. RoboCupJunior Australia must remain accessible to students around the world.

Important Information

Competition Format

At the Queensland State Championships, some challenges run on both days. Please ensure you have made appropriate arrangements for your teams to compete on the correct days.

National Teams will be required on both competition days. National events will occur both on Saturday 9th October and Sunday 10th October for ALL Divisions

State Competition Format

Saturday 9 th October	Sunday 10 th October
Onstage Novice Rescue Line Primary Rescue Line Open	OnStage Experienced Rescue Line Secondary
Rescue Maze Soccer All Divisions	Rescue Maze Soccer All Divisions

Mentors should check the official 2021 RoboCup Junior Australia challenge rules to check their teams' divisions:

OnStage:

<https://robocupjunior.org.au/onstage>

Rescue Line:

<https://robocupjunior.org.au/rescue>

Rescue Maze:

<https://www.robocupjunior.org.au/rescue-maze/>

Soccer:

<https://robocupjunior.org.au/soccer>

Participating teams should comprise two to five students. One-person teams will only be allowed to compete at the discretion of the organisers (please email margaux.edwards@robocupjunior.org.au) if requesting a one person team or teams larger than five)

Each team should have at least one robot (one robot for Rescue, one or two for soccer and at least one for OnStage).

Eligibility

Open to all Primary and Secondary aged students.

Schedule – RoboCup State Championships 9th & 10th October 2021

SATURDAY 9th October	8:30am 9:00am 9:15am 10:00am 3:00pm 4:30pm	Saturday Registration Team and Mentor Briefings Competition Starts – OnStage Novice , Rescue Maze, Soccer (All), Rescue Line Primary & Rescue Line Open Official Opening Finals Begin Presentation for OnStage Novice, Rescue Line Primary & Rescue Line Open
SUNDAY 10th October	8:30am 9:00am 9:15am 2:45pm 4:30pm	Sunday Registration for OnStage Experienced, Rescue Line Secondary Team and Mentor Briefings Competition Starts - OnStage Experienced , Rescue Maze, Soccer (All), Rescue Line Secondary Finals Begin Awards & Closing Ceremony

Enquiries

All State Competition enquiries should be directed to Margaux Edwards
margaux.edwards@robocupjunior.org.au

COVID-19 Restrictions

All visitors must follow COVID-19 restrictions as per below.

- When entering UQ Center, you must register using the Check In QLD app. The QR code for checking in will be set up at the entrance of the building.
- Masks must be worn indoors at all times
- You must be seated when eating or drinking

Dedicated spectator areas will be offered, both standing and seated areas. Please be mindful of other visitors and respect the rules. No seated areas will be available in the main UQ hall.

Venue and Access

UQ Centre, University of Queensland, St Lucia, QLD AUSTRALIA ([link to venue map](#)). Students can be dropped off and collected from the front entrance to the centre on Union Rd. RoboCup Junior Australia and our volunteers are not providing supervision for competitors, so be mindful of this when leaving students at the competition venue. Contact the school, organisation, or team mentor if you have questions regarding supervision.

Car parking is available under the venue and under the sports field adjacent to the venue. At this time, weekend parking in these car parks is free but users need to check conditions on entry to the car parks.

For larger vehicle and bus parking please contact the UQ Centre directly.

Disability access is available with lifts, designated parking and assistive technology in place across the University of Queensland.

Food and Drink

Students are recommended to bring their own food and drink. Although there has been a canteen running in previous years, this will not be available in 2021.

There are also additional food and drink outlets located adjacent to the UQ Centre, including the Sports Club, and the UQ Fitness Centre. Cafes serving lunches can be found all around campus. It is recommended teachers/mentors supervise their students if visiting these venues.

What to Bring

- Food and drinks - no canteen available at UQ Centre.
- Laptop/s with fully charged batteries
- Robot with fully charged battery, and spare batteries as required
- OnStage teams should bring their music as a backup on USB in MP3 format

Judging and Volunteering

Teachers and mentors of registered teams are requested to judge or volunteer their time. Gaining judging experience may assist your teams when providing feedback after competitions.

Please note that parents and other community members will not be allowed to volunteer this year.

Please indicate your competition preference on the volunteering form:

<https://forms.gle/ncnN2rEfi4RwforJ9>

State Registration

Each team needs to be registered to enter the competition. Teams are encouraged to come up with a name for themselves. Names that are too long, or are considered unusable by the Competition Chair may be modified without consultation.

Registration is now open via [QLD Events - RoboCup Junior Australia](#) and will close on the 5th October 2021. Late registrations will be only accepted at the discretion of the organisers. Please email margaux.edwards@robocupjunior.org.au

Registration costs \$110 per team (including GST).

Registration will open at 8:30am in the UQ Centre Foyer. Team members will be given an identifying wristband.

National Registration

Each team will need to register for the National competition through the National Registration System. Registration closes on the 1st October 2021. All competition details can be found here: [RoboCup Junior Australia National Championships](#). Teams who wish to compete at a National level must also be registered for the State Competition.

Please note that for all National live events, a Team mentor, adult supporter or parent must be present at the live performance and interview via Microsoft Teams. If the team's mentor, adult supporter or parent is not present, the Microsoft Teams call will be immediately ceased.

Mentor Declaration

As part of each school's registration, mentors are required to complete and submit a Mentor Declaration to be submitted to the online registration system. The mentor declaration is attached to this information pack.

Electrical Equipment

Power will not be provided to each table at the students' work area. Charging stations will be located in a number of spots around the venue, inside the student work area. Laptops cannot be charged at these stations. These are provided to allow teams to charge their robots or spare batteries between rounds. There will be a separate charging station provided for teams using custom robots that will allow charging of more advanced batteries. Ensure that charging these batteries is done as per the specifications for that battery.

It is imperative that team members DO NOT touch equipment that does not belong to them. Team members who do this could face disqualification from the event. This includes, but is not limited to, removing another team's robot or equipment from a charger, making any changes to another team's robot or taking another team's equipment away from the charging station area.

All electrical equipment used at UQ MUST be electrically tested and tagged. Please ensure that all equipment you bring to UQ has been tagged (non-UQ tags are acceptable as long as they are within date). As a service to all teams, there will be a complimentary test and tag station set up during Saturday and Sunday mornings, however access will be on a first come basis and wait times could be long.

Wi-Fi will not be available to attendees.

Power Tools

To comply with the University of Queensland's Workplace Health and Safety requirements, a separate, supervised workspace has been added to the student area. Teams who need to do soldering, cutting, shaping, and any other similar activities must do so in this area.

Teams will not be able to use their own powered tools. RoboCup will provide some limited powered tools including soldering irons, hand drills, hot glue guns, and bench power supplies. If teams wish to enquire about particular equipment, please email margaux.edwards@robocupjunior.org.au

Robots

Bring robots fully charged with spare batteries. Charging stations for LEGO EV3 and SPIKE Prime will be available. Laptops are to be fully charged and if possible a spare laptop should be available.

Please ensure that your school's network setup allows the laptops to access and run the programs written for the robots while they are away from the school (access to shared network drives, for example). No Wi-Fi will be available.

Some robot kits (including the LEGO SPIKE Prime, and Mindstorms EV3) can be purchased from [Modern Teaching Aids \(MTA\)](#).

LEGO EV3 Classroom Bluetooth

Please note that due to connectivity issues with the EV3 Classroom we advise teams against relying on Bluetooth to connect to their robots during the competition. If you are not using Bluetooth on your EV3 brick, we would suggest turning off Bluetooth connectivity to avoid accidental connections from other teams.

Photos and Media

All attendees, whether competing or not, may be photographed or filmed by the media, University of Queensland, RoboCup Junior Australia, or other individuals at the competition. Signs will be prominently displayed at the entrance stating that people in the competition area may be recorded for the purposes listed. By registering your students, you agree to these terms on their behalf.

Tips, Tricks and Tutorials

There are a wide range of tutorials available from the 'Getting Started' section on the RoboCup Junior Website <https://www.robocupjunior.org.au/>

Competition Information

OnStage

- Each team will be given designation code (eg. N12, E2 etc).
- Please ensure your team is at the marshalling area for either the performance or interview at least 10 minutes before your allocated time.

All teams will get two preliminary performance opportunities throughout the day. There will be one performance per stage each with a different panel of judges.

Teams will also have a technical interview scheduled throughout the day. The technical interview will take approximately 10 minutes.

Performances are a maximum of 6 minutes, which includes set up, performance and pack up time. The actual performance time is 2 minutes. The best score out of the two performances will be added to the technical interview score to give your final score.


Performance Stages will be located in the Main Hall (Stage 1) and Lecture Theatre (Stage 2) (Across the foyer, opposite the Main Hall).

Music

Mentors must upload their music to the RoboCup Junior Mentor Upload in an mp3 format by 9am on the 7th of August. It is recommended that you also bring a backup copy on a named USB.

Technical Description Paper (TDP)

It is expected that teams meet the requirements for the technical description which is judged during the interview. The electronic upload of the TDP is required through the Registration System.

Team name	Division	Students	Actions
Test	Novice OnStage Performance	Test	View Details Upload file 

Teams who present to their interview without having uploaded the TDP in advance may be awarded no marks for the relevant section on their interview score.

Rescue Line

The Rescue Line competition will be held in the Main Hall. Following scrutineering there will be a minimum of four competition rounds. Scores will be displayed progressively throughout the competition.

The finals will be held in accordance with the published rules.

Note that there may be courses that include the smaller rescue tiles (300x300mm) as well as our regular 600x600 tiles.

It is important to attend the Rescue briefing at 9:00am on the day to be clear on the interpretation of all rules, especially any local variations.

Please note the following structure for each round:

1. Find your team name and code on the team listing spreadsheet
2. Look at the schedule to find out the time you are required for each round
3. Make sure you are at the marshalling area at least 5 minutes before your scheduled time
4. When your group is called, tell the Marshall your team name and code so you are directed to a Rescue Field
5. Check the Scorer on that field has your score sheet
6. Run your robot
7. At the conclusion, initial the score sheet to confirm your score
8. After your run, find out when you are scheduled for your next round

You will be running on all courses at some point during the day, but you will not know which one, until the marshal directs you to a course.

Rescue Maze

Teams will participate in several rounds each day. The results will be determined by the total of all scores (no finals). Teams will be given sufficient time between rounds to update, modify, and improve their programs and robots.

Competitors should expect heated victims, obstacles, debris, ramps and changing environmental conditions as outlined in the rules. We expect to use DAISO-brand hand and body warmers as victims. These are larger than the minimum size, and will be centred on the wall. They may be placed on a backing material to help reduce heat transfer through a wall.

Soccer

The tournament draw will be posted in the venue. Teams will play a number of preliminary rounds, with top-ranked teams proceeding to finals being held on Sunday afternoon. Students should check the draw carefully, and arrive at the field a few minutes before kick-off.

All team robots must be inspected at the soccer desk before your first match to ensure they comply with the competition rules. All students should be familiar with the rules before the competition.