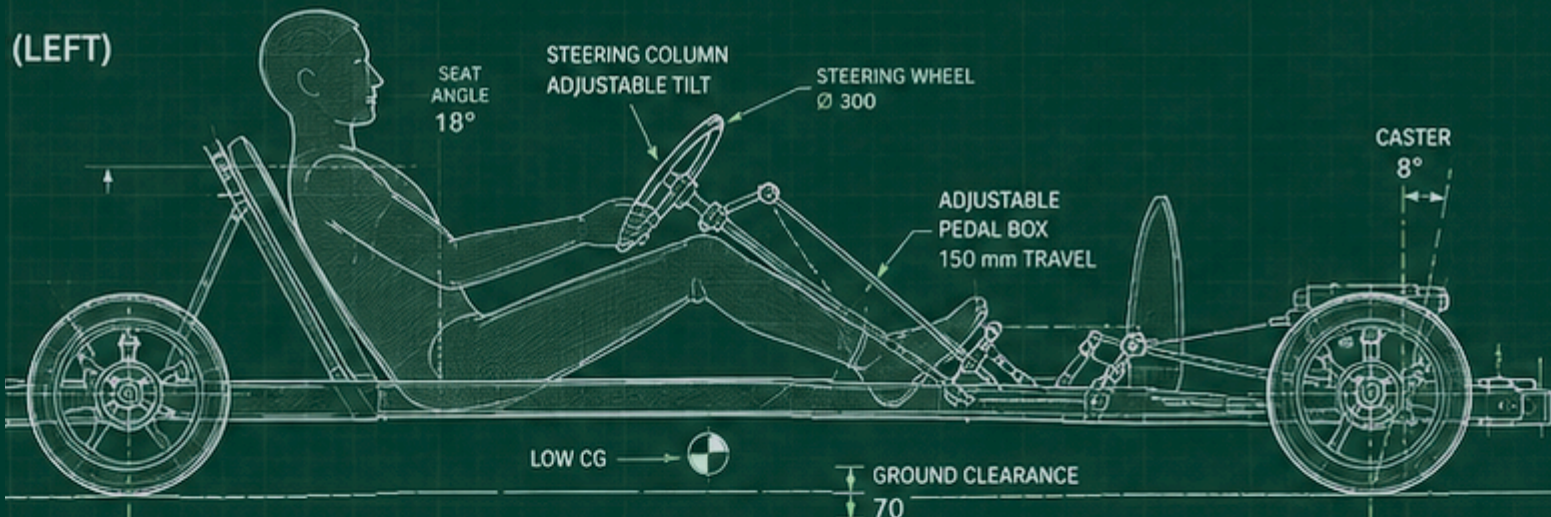
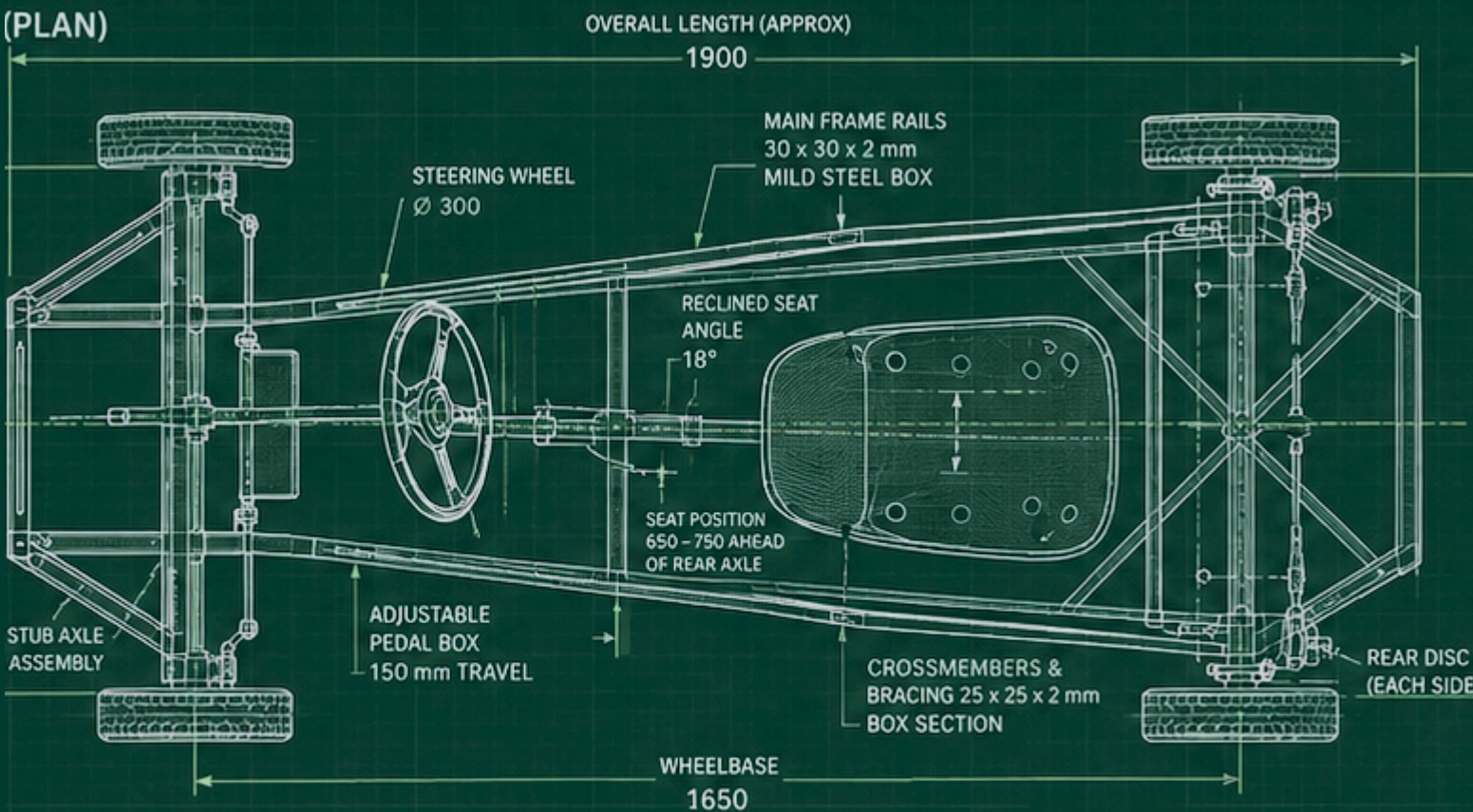


4 NOV 2026 SURREY RESEARCH PARK **SOAPBOX DERBY**



Participant Guide



SURREY
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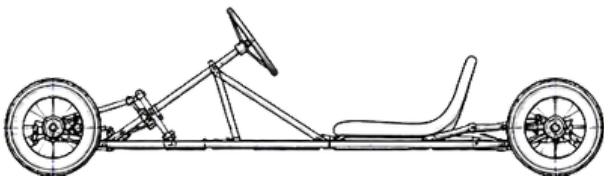
WHAT YOUR PARTICIPATION MEANS

The **Surrey Research Park Soapbox Derby** is your opportunity to get together with teammates, colleagues and friends and take on a fun engineering challenge unlike anything else in the Park's history.

Put your collective creativity, problem-solving, design and engineering skills to the test and build a soapbox kart / gravity-powered racer for a chance to win the coveted Surrey Research Park Soapbox Derby Trophy.

We're welcoming first-time teams, non-technical creators and seasoned engineers alike. Whether you're interested in aerodynamics and performance, creativity and design, or simply want to do something different with your colleagues - then there's a place for you on our grid.

It's also a fantastic way to showcase your company's culture, values and personality. Whether that's sharing your soapbox story with your social followers, promoting your products and services, or fundraising for your company's preferred charity.



DON'T FORGET TO REGISTER YOUR TEAM:

After reading this guide, assembling your team and appointing a team captain or project lead, to secure your place on the grid, your team captain must submit an Official Registration Form by 12noon on 2nd October 2026.

OPPORTUNITIES FOR YOUR TEAM

- Engineering Challenge
- Creativity And Innovation
- Team Building
- Collaboration
- Networking
- Autumn Boost
- Friendly Competition
- Engagement And Marketing
- Community Impact
- Fun
- Trophy & Bragging Rights

HOW YOUR TEAM WILL BE SCORED

Building a fast soapbox is only part of the challenge. Winning teams will combine raw racing speed with creativity with an opportunity for the whole crew to get involved.

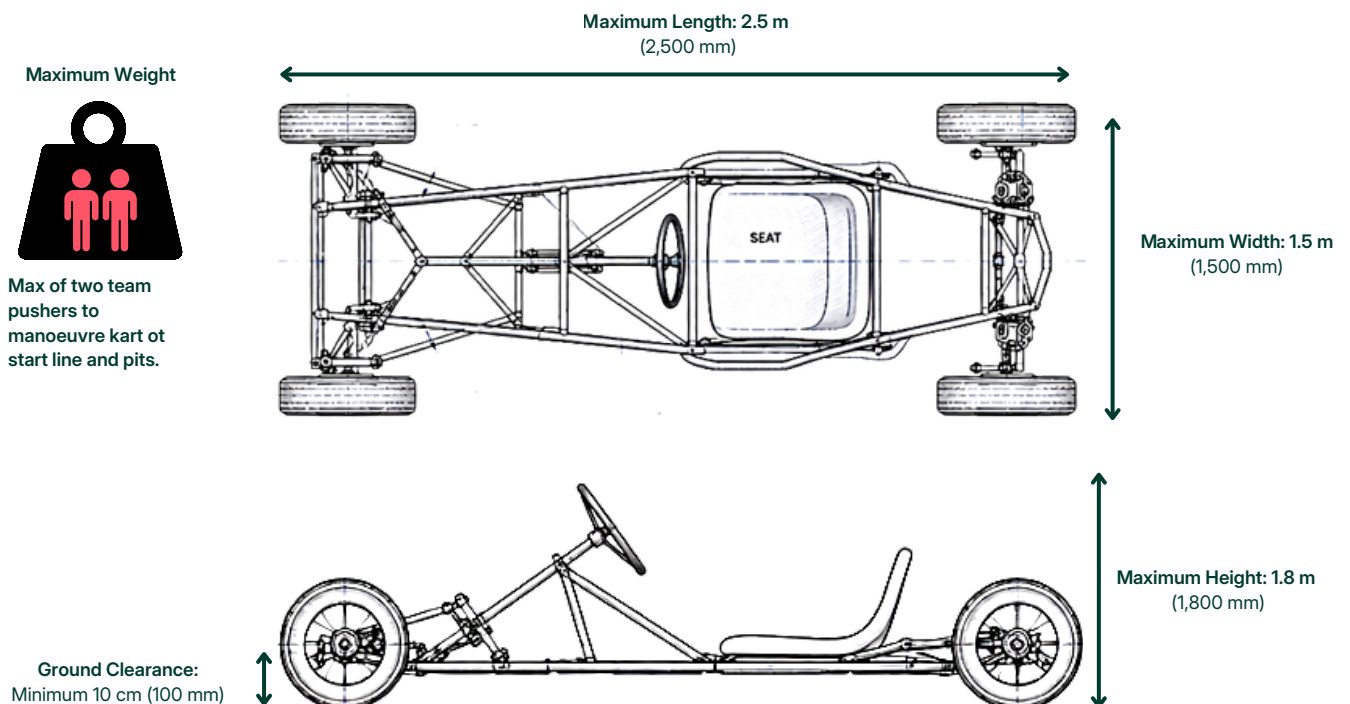
- **Elapsed Time:** Your official race time from leaving the launch ramp to crossing the finish line.
- **Course Completion:** Navigating chicanes cleanly without spins, stalls, or shedding parts on track.
- **Creative Flair:** Vehicle design and originality of your theme, clever aesthetic touches, and innovative use of upcycled materials.
- **Team Support & Cheerleading:** Every team will have their own signature soundtrack played over the PA system while staging before your course run. This could be a motivational anthem or hype song. Start brainstorming now. We'll collect details closer to the event.

DISCOVER THE SOAPBOX DERBY.

GETTING STARTED WITH YOUR SOAPBOX

To ensure your driver's safety and ensure everyone has a fun, trouble-free event, we've set out some tech and safety requirements. These follow the tried-and-tested design standards of the world-famous Red Bull Soapbox Race and other established UK regional gravity race events.

SOAPBOX BUILD MINIMUM & MAXIMUM SPECIFICATIONS



- **Maximum Width: 1.5 m (1,500 mm):** Measured at the widest point (outer wheel rims or decorative bodywork) to ensure clean clearance through chicanes and pit lane barriers.
- **Maximum Length: 2.5 m (2,500 mm):** Measured from nose to tail. Keeping your wheelbase compact improves downhill cornering agility.
- **Maximum Height: 1.8 m (1,800 mm):** Creative fins and themed flourishes are welcome, but keeping the bulk of your structural weight low prevents rollovers.
- **Ground Clearance:** Minimum 10 cm (100 mm) Essential under the chassis belly and front overhang to clear bumps and track surface transitions without beaching.
- **Maximum Weight (Excluding Driver):** Must be manoeuvrable to and from the paddock area safely by a **maximum of two pushers**.

 **Top Tip:** While you may require mass for downhill momentum, the track includes a chicane and ends with an incline, so you may want to ensure your soapbox is light enough for just the driver to push.

ALL VEHICLES MUST HAVE:

- ☒ A working braking system
- ☒ A working steering system
- ☒ Secure wheel retention (locking nuts, split pins, etc)
- ☒ No sharp edges or protrusions
- ☒ Structural integrity of chassis and bodywork
- ☒ Secure seating position and swift exit
- ☒ Compliance with weight and dimension limits.
- ☒ Designated driver
- ☒ No propulsion systems

ALL DRIVERS MUST HAVE:

-  Helmet
-  Goggles / eye protection (if not using helmet with visor)
-  Gloves (full finger)
-  Knee and elbow pads
-  Closed-toe shoes

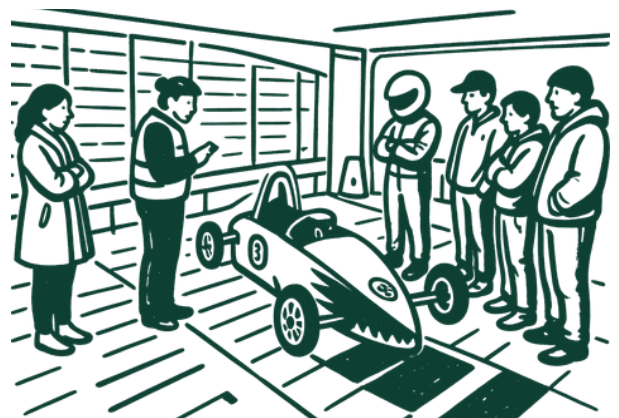
This is the absolute minimum, please feel free to wear any additional safety gear to help you feel safe and enjoy your soapbox run.

Teams are responsible for supplying their own personal protection equipment ahead of derby day. Sourcing kit early ensures your drivers are fully kitted out, comfortable, and ready to pass morning scrutineering.

YOUR SAFETY IS OUR PRIORITY

Everyone's safety and enjoyment are our top priorities, and a few quick checks ensure all participants can tackle the course with confidence. In line with event best practice, every soapbox will undergo a friendly, straightforward scrutineering session in the pit lane prior to running. This will involve you walking through the technical checklist above to confirm each requirement is met.

Drivers and reserve drivers will also complete a standard participant waiver.



ABOUT THE COURSE

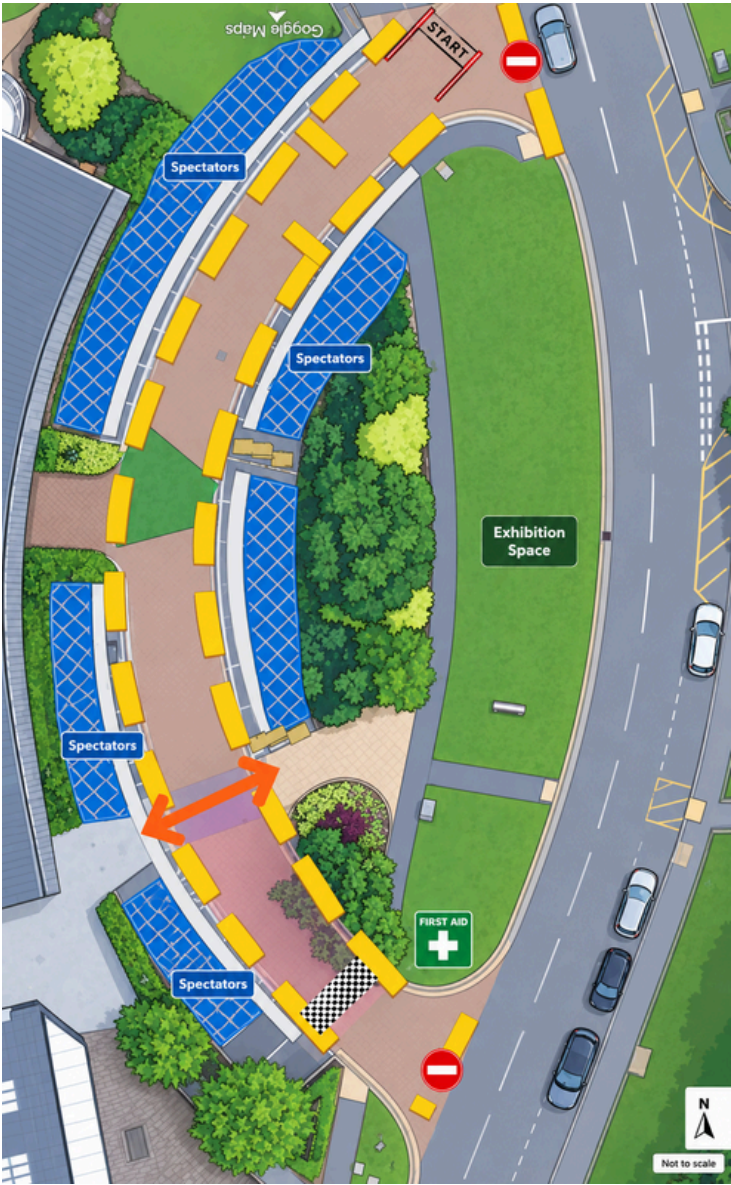
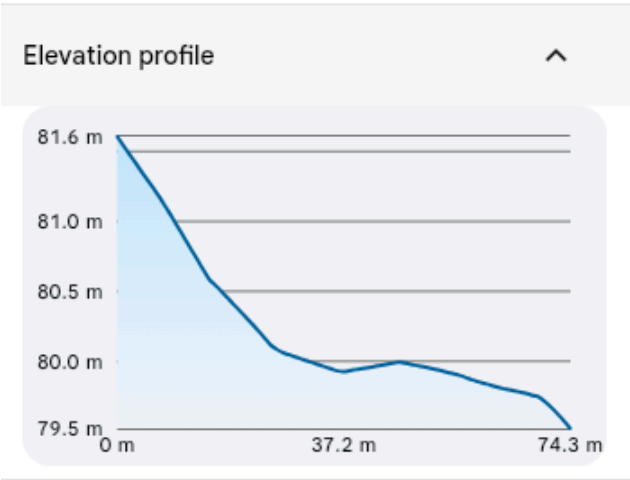
Event location: Surrey Research Park, Guildford (GU2 7YG)

Key Venues:

- **Track:** Surrey Technology Centre visitor car park,
- **Pit lane:** Covered staff car park
- **Showcase Exhibition Space:** Grass areas adjacent to Occam Road.

Course Details:

- ~75m track length
- Max slope 4.3 degrees (Median 0.9 degrees)
- Brick surface
- Slight camber





A completely off-road course, creating a safe and practical space for the event with minimal disruption to the public and Park companies' operations.



Gradual curved course with a descent of 1m. Slight rise before the end to bleed off any excessive speed. We're calling this stretch 'Flintstone Crest'.



Fastest descent in the first 30m from the start line into a gentle chicane.



High friction brick track surface means engineering and driving skills are key to a quick course completion.

GETTING STARTED ON YOUR SOAPBOX DESIGN AND BUILD

Building a gravity racer is the ultimate in team collaboration: an energising, hands-on and creative challenge that can fit cleanly into breaks throughout your working day.

To get started, you don't need an F1 pit crew or a garage floor, just a shared whiteboard, some strategic scavenging, communication and workplace ingenuity.

1. BUILD A WINNING TEAM

The Surrey Research Park Soapbox Derby is designed as an open, accessible event where creative problem-solving, collaboration, and community spirit matter far more than technical engineering experience.

It's a great opportunity to tap into everyone's unique strengths, break down silos, and develop or hone personal and professional skills, in a fun way.

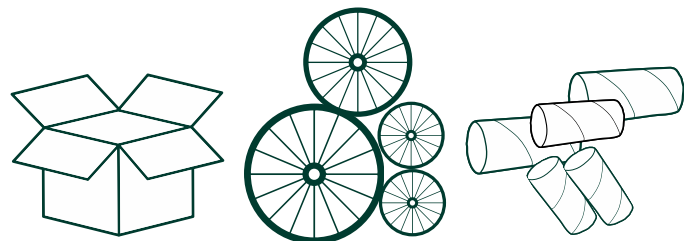
- **Team up with six of your friends or colleagues.** Maximum of six per team to ensure everyone has a meaningful, hands-on role throughout the build.
- **Mix diverse skills:** Combine skilled engineers with practical makers, creative designers and a confident driver.
- **Nominate a Team Captain:** Appoint one project leader to be your primary contact. They will receive email updates and submit your team's official Confirmation form before 2nd October.
- **Appoint a reserve driver:** This contingency will guarantee your soapbox still runs, even if your primary driver cancels unexpectedly.

2. SCOPING OUT YOUR DESIGN: BUILD A MOCK-UP

Once you have formed your team and before you start gathering wheels or unscrewing anything, you may like to follow these recommendations gathered from across the web about how to get started with your soapbox design and build at work.

You will need:

- **Whiteboard or Large Paper Pad:** Gather your team (maximum of six) set up a lunchtime session to sketch silhouette ideas, define your team theme, select your hype or motivation soundtrack, select a charity to support
- **5m Measuring Tape & Floor Masking Tape:** Tape out the 1.5 m x 2.5 m race envelope directly on an office breakout floor. Have your driver sit inside so everyone immediately visualises cockpit ergonomics and wheel placement. Also, strike a pose, take a photo and share with your followers to announce your participation.
- **The "Scavenge & Donation" Channel:** Set up an internal group chat on the platform of your choice to pool free surplus materials: ask colleagues for scrap plywood, unused BMXs or kids' bikes, old pedal karts, garden trolleys, and delivery pallets, or whatever your design requires.
- **Start with a cardboard mock-up kit (Boxes, Tape, Scissors and craft knife):** Cut and fold cardboard boxes to rapidly mock up nose cones and body shape in 3D at zero cost to test your concept.



KEY DATES AND NEXT STEPS

To keep the build manageable around your working day and let you focus on your soapbox, there are only a few milestones to track, ahead of the big day on Wednesday 4 November.

- **12noon on Friday 2 October – Official Team Registration Closes:** Submit the Team Registration Form to officially enter your squad of up to six, secure a spot on the grid and lock in your designated pit space (see below).
- **Mid-October – Derby Day Team Form Issued:** Team Captains will receive a quick online form to lock in your official team name, vehicle theme, full team member roster, lead and reserve driver nominations, and your chosen walk-up music track.
- **Late October (Date TBC) – Optional Driver Track Walk :** Join us on the course for an informal walk-through. This is a great chance for drivers to inspect the racing line and gradient, test out sightlines, and capture team photos and last minute social media content before the big day.
- **Wednesday 28 October – Completed Derby Day Team Form deadline**
- **Wednesday 4 November: Derby Day:** Bring your competition-ready soapbox to the Surrey Technology Centre, Surrey Research Park for the big event!

STILL GOT QUESTIONS

If you have read through this guide and have a question we haven't covered, whether it's about team logistics, timings, or how the day will run, we are here to help.

Email: srpmarketing@surrey.ac.uk



REGISTER YOUR ENTRY TODAY

So, you've rallied your squad, nominated your Team Captain, and are ready to make your entry official!

You don't need a finished vehicle design or a polished race strategy just yet. Submitting your registration simply claims your paddock bay, connects your captain to our event updates, and puts your organisation in the running. Deadline for registration is **12 noon on Friday 2 October, 2026.**

Click below to officially register your team.

[!\[\]\(4688aadfd656ded00cd6bdfae55089a9_img.jpg\) Officially Register Your Team Today !\[\]\(3f972bf2e2155492661f419a89867457_img.jpg\)](#)

SECURE YOUR SPOT ON THE GRID

Questions? Email srpmarketing@surrey.ac.uk
#SurreyResearchPark