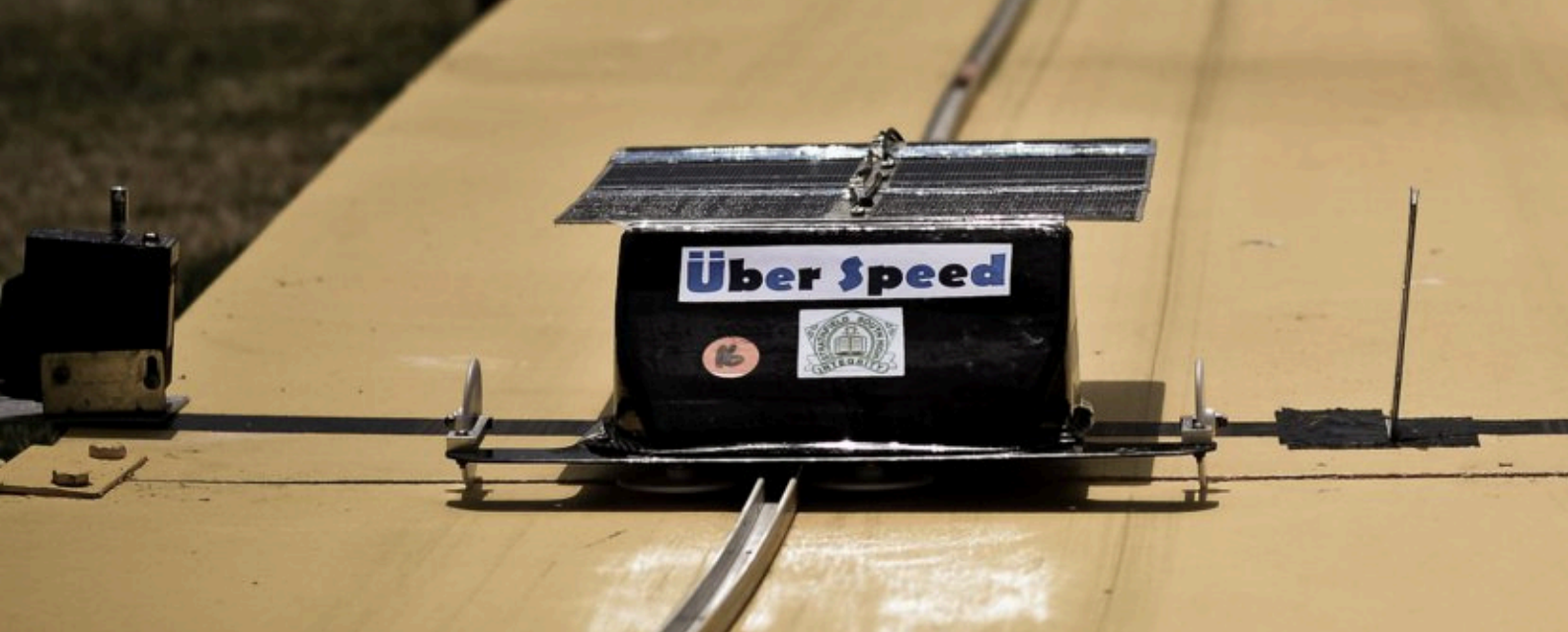




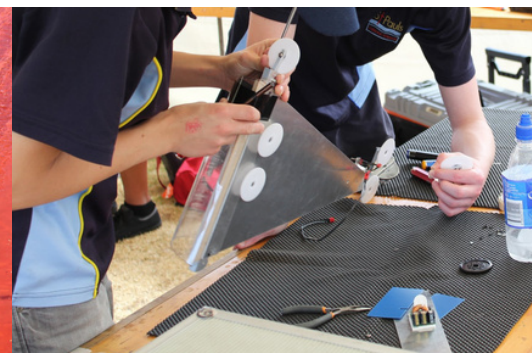
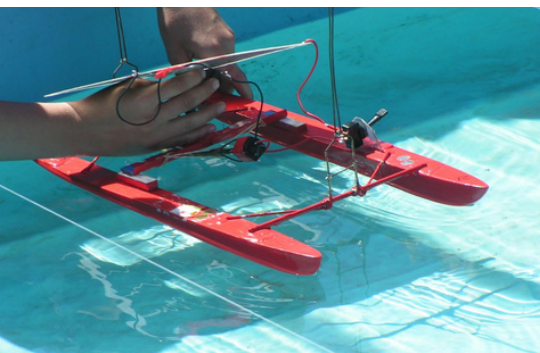
2026



HOBART CITY HS (OGILVIE CAMPUS)

AUSTRALIAN-INTERNATIONAL MODEL SOLAR CHALLENGE EVENT GUIDE

SAT 5 & SUN 6 DECEMBER • 8:30AM-3:30PM



AIMSC EVENT DATE AND LOCATION

The **2026 Australian-International Model Solar Challenge** is being held in **Tasmania** on **Saturday 5th and Sunday 6th December** at the **Ogilvie Campus of Hobart City High School** (228 New Town Rd, New Town, Tasmania 7008).

Free parking will be available on campus or along surrounding streets. All racing will take place on the grassed area directly outside the campus sports hall. Please see the attached map at the end of this guide for a basic layout of the event.

Please note that the car competition will run across both days but the boat event is **only** on Sunday 6th.

Although a competition for students, the event will be open to a public audience and welcomes along family members, sponsors, media news crews and other interested spectators from the wider community.

All persons choosing to attend the event will acknowledge and give consent to the possibility of being photographed or filmed by the AIMSC or any other individuals for news, marketing or promotional purposes.

TEAM ACCOMMODATION AND TRANSPORT

The venue is located less than 10 minutes drive north of the Hobart CBD. Interstate and overseas teams will be responsible for their own accommodation and transport to and from the event. It's suggested that teams have a bit of a look around on their preferred online travel website (ie booking.com, hotel.com, wotif.com, trivago.com, airbnb.com, etc) for something that meets their needs. A couple of budget options to consider are as follows:

www.utas.edu.au/uni-life/accommodation/short-stay
www.discoveryholidayparks.com.au/caravan-parks/tasmania

UTAS short stay accommodation is usually available from Dec-Jan and located approx 15min drive to the event. Please contact their team for further enquiries.

Both the Hobart and Hobart Mornington Discovery Parks are located within 15-20 minutes drive of the event and offer a number of inexpensive cabins and lodges.

There are also several motels, apartments, motor inns, etc options located inside of a few minutes drive to the event. Some are potentially within walking distance but carrying around solar gear for extended distances may be less than ideal.

Interstate teams most often organise their own hire vehicle but taxis/ubers are also an option. Or you may like to consider Metro Tasmania's regular bus service which is currently free under a cost-of-living initiative run by the Tasmanian Government. The Hobart CBD to Glenorchy route passes directly by the event:

www.metrotas.com.au/timetables/hobart/2026-high-frequency-service-glenorchy-moonah-new-town-hobart/

Taxis and Ubers or a Skybus service operate between the Hobart Airport and Hobart CBD:

www.skybus.com.au/hobart-express/

ENTRY FORMS

Interstate/overseas teams must have entered by no later than Friday November 27th to be included in this year's AIMSC start list. If you haven't already received an entry form then please download the from:

www.tassolarchallenge.org/register/

Please complete and return to the email provided on the form.

AIMSC TIMETABLE

Event setup will take place on Friday December 4th. Teams are welcome to visit the venue and use any car tracks for testing but not until after 3:30pm once Hobart City HS classes have finished for the day. The boat pool will be set up on either Friday or Saturday but not filled with water until early Sunday morning.

Car teams should aim to have arrived at the event by 8:30am on both days of competition. Boat teams should arrive by no later than 10am on Sunday. Both events begin with team sign-in and scrutineering. Racing will commence after all vehicles have been checked out and given a race number. Cars and boats will not be permitted on any tracks or in the pool for testing until they've received a number sticker. An approximate schedule for the weekend can be found below:

Friday

3.30pm - Car track/s open and pre-scrutineering available.

Saturday

From 8am - Car sign-in and scrutineering for early arrivals

8:30am - Official car sign-in and scrutineering commences

11:00am - Pre-race briefing for all car teams before round robins begin

Approx. 12:30pm - Lunch break

1-3pm - AIMSC car round robins continue

3:30pm - Knowledge questionnaires due

Sunday

From 8am - Car and boat sign-in and scrutineering for early arrivals

8:30am - Official car sign-in and re-scrutineering commences

10:00am - Official boat sign-in and scrutineering commences

10:00am - Car round robins continue

11:00am - Boat round robins begin

11:00am - Car knockout rounds begin

Approx. 12:30pm - Lunch break

1pm - Boat knockout rounds begin and car knockouts continue

2pm - Boat finals

3pm - Car finals

3:30pm - Awards presentations

Times may vary somewhat depending on entry numbers, weather conditions and racing format.

CAR SCRUTINEERING: PRISM AND MANIKINS

All entries will need to be scrutineered to ensure they meet the 2026 AIMSC regulations. Teams of non-complying cars will be given an opportunity to fix any issues or otherwise be ineligible to participate in the final knockout competition.

Car teams will need to present their 2000cm³ rectangular prism to scrutineers for a quick confirmation of volume. This box will then need to be placed in the car and carried for all races throughout the event.

Teams must provide their own commercially available 4.5" wooden manikin driver and demonstrate how it is seated in their car. Manikins are to be carried in all races.

CAR SCRUTINEERING: PANEL POWER TESTING AND BALLAST

All teams must provide their own solar panel and this will be power tested on a light box at standard test conditions (1000 W/m² irradiance, 1.5 air mass, 25°C). Panels may have any type of connector but teams must provide scrutineers with a means to attach a set of crocodile clips for power measurement.

Panels will be ballasted according to the formula: $\text{Weight(g)} = 200 \times [\text{Power(W)} - 4.3]$

Panel weights will not be known until after power measurement so teams must bring sufficient ballast to cover whatever the calculation ends up being. Teams using a Scorpio or Kitesite solar panel can expect their required weight to fall in the 150-400g range but this could be up to as much as 540g at the 7W limit.

BOAT SCRUTINEERING

All boat panels will be checked to confirm they meet the 350 cm² cell area limit. Boats in the junior division must also demonstrate that their motor retails for no more than \$12 AUD.

CAR KNOWLEDGE QUESTIONNAIRE AND VIDEO SUBMISSION

It's important not just to design and build something that works but also have an understanding of the engineering principles at play. As such, teams will be handed a short questionnaire when passing through scrutineering. This will aim to test the depth of student understanding and consist of several questions related to solar car design and solar energy. Teams will have until 3:30pm on Saturday to complete and hand in their answers.

Teams vying for overall AIMSC points champion will also be required to submit a video presentation as detailed in the regulations. This can be either handed in to the AIMSC on usb drive on the Saturday or through a filesharing website prior to the event. Maximum points are as follows:

Video Presentation	30 points
Knowledge Questionnaire	30 points
Racing Result	40 points
Total	100 points

TRACK/POOL TYPE, RACING FORMAT AND WINNER CHECKS

Some car round robins may be run on a single-lane oval track but most racing (including all knockout rounds) will take place on a large 100m dual-lane figure-8 track. Winners on the figure-8 track will be the first to complete 1 lap and cross the finish line (with the potential for 2 lap finals). Races on the oval track will consist of 2 cars starting on opposite sides and travelling around in the same direction until the faster car begins to catch their opponent.

The boat competition will be held in a shallow 8-10m long pool and will see 2 to 4 boats race one another side by side with the winner being the first to travel from one end of the pool to the other.

All cars and boats will initially participate in a series of round robin races against different opponents. The number of race wins and times from these heats will then be taken into account when seeding them for the final knockout competition. The car and boat knockout format will be decided upon by event organisers and run either as a straight or double-elimination draw, the latter of which requires participants to first lose in two rounds before being eliminated.

Winners of races may be spot checked to make sure they still comply with event regulations and cars are carrying the correct amount of ballast. If any discrepancy is found then the win will automatically go to the opposing car/boat.

RACE SCHEDULE AND FORFEITS

Earlier rounds will be run according to a pre-determined race schedule. Teams will be given access to this schedule and be responsible for keeping track of their upcoming races. Cars and boats will be expected to be at the relevant starting area 2-3 races ahead of time. A final PA call may be made for any missing teams but please don't rely on this, track officials will not go chasing down cars and boats that haven't shown up to race.

Teams that haven't turned up for their race in time without notifying event officials of a valid reason will automatically forfeit that particular race. Plenty of time is given to prepare between races and students wanting to make any last-minute modifications must bring the necessary tools with them to the starting area.

Each team may initially have approximately 15 minutes between races. This time is for making modifications or repairs to their vehicle and preparing for the next race. Students may also like to take this opportunity to complete the knowledge questionnaire or support their fellow teams.

LUNCH BREAK

A short intermission will take place at around midday on both days. This has been scheduled for approximately 12:30pm and the AIMSC will do its best to continue on with races as quickly as possible. Tracks or the boat pool will be open to teams for testing during any breaks.

A sausage sizzle or food truck may be available at the event but final details have yet to be confirmed. Participants are otherwise asked to supply their own lunch and snacks. Those looking for additional refreshments can find a nearby takeaway store on New Town Rd (near Bromby St) or head down to New Town Shopping Plaza (1 minute away by car). Teams intending on leaving the venue at any point are advised to keep some members behind so racing can continue should they take a bit longer to return.

SCHOOL MARQUEES AND TOOLS

Local schools with their own marquee and trestle tables used for sports carnivals, outdoor events, etc. are asked to bring these along to provide extra shelter for their teams on the grassed area around the tracks. Please seek out a AIMSC volunteer on arrival to find out where these should be set up.

Teams are expected to bring along their own basic hand tools and spare parts for making car adjustments or repairs (screwdrivers, spanners, pliers, etc). Only battery-operated power tools will be permitted at the event, no mains power equipment. The AIMSC will have a soldering iron, drill, grinder and hot glue gun at hand for any local or interstate team to use in emergencies.

Users of any powered equipment will be required to wear adequate eye and ear protection at all times and ensure no damage is done to any work table they're supplied with.

AMENITIES

Toilets are located in the sports hall alongside the car tracks and boat pool. The sports hall and several marquees will provide some undercover work areas for teams making adjustments to their cars. It's an outdoor event and recommended that participants bring along their own drink bottle, hat, sunscreen and some warm clothes to cater for Tasmania's variable weather.

ADVERSE WEATHER

Model solar cars and boats run in virtually any weather, even in the rain, so please don't bank on a perfectly clear and sunny weekend of racing. In the event of any unfavourable conditions (ie heavy rain and/or strong winds), the AIMSC may direct all teams to stay in the sports hall unless racing. The competition may need to be stopped and started at irregular intervals to work around the very worst of conditions.

AWARDS

Major awards will go to the top 4 AIMSC car and boat placegetters, overall car points champion as well as a number of other national category winners.

OTHER INFORMATION

The Tasmanian oval track has slightly tighter radius corners. Any car races held on this will only run in an anti-clockwise direction. Teams will be permitted to make changes to improve the cornering stability of their car (adjust solar panel or ballast placement, etc).

Boat teams can expect to always race in the same direction as determined on the day. The pool heading may be in any direction (N-S, E-W, etc).

Race finish times on Sunday will vary according to how far a team progresses through their knockout event after lunch. Those eliminated in earlier rounds may be done by 1 or 2pm while finalists will race through to the end at around 3pm.

OTHER INFORMATION - CONTINUED

Teams are permitted to cool down their solar panels with water ice but a replacement panel will not be allowed should any problems arise from this. Cooling sprays or dry ice (solidified CO₂) are strictly prohibited.

Track officials will determine the winner of each race. If a team believes they've been mistreated or lost due to an unfair incident or issue with the track then they must report this immediately after their race. AIMSC personnel will work together to resolve the issue and return a final decision asap.

Please remember that this is a national-level student competition and only students will be allowed to handle/modify/repair their cars. Some teacher/parent guidance is permitted in earlier rounds but students will need to make their own decisions during the final knockout competition.

For further information of any kind please contact the AIMSC at tassolarchallenge@gmail.com or visit the Tasmanian website at www.tassolarchallenge.org



New Town Rd

Emergency
Evacuation
Point

Sportshall
&
Toilets

Track/pool
&
Marquees

St Johns Ave

St Johns Ave

Veterinary Board
of Tasmania

Hobart City High School
- Ogilvie Campus