

2023 Grand Challenge – High School Edition

Frequently Asked Questions

Here you will find some of the commonly asked questions about the Grand Challenge – High School Edition. If you have any additional questions, please email grandchallenge.hse@latrobe.edu.au

How can I participate?

To participate, form a team of three to five participants and register.

Registrations open 15 October 2022 and close 10 January 2023.

During registration, you must select an area of interest from the following options:

1. **Infrastructure and Technology** (Eg: Smart buildings, Smart streetlights, Smart security)
2. **Mobility and Transport** (Eg: Smart parking, reducing carbon emissions, Smart traffic lights)
3. **Health and Wellbeing** (Eg: COVID19 related technology, Robotic technology, remote patient monitoring)
4. **Cultural Heritage** (Eg: 3D scanning of historical places/temples etc, VR tours, preservation of historical monuments)
5. **Energy, Waste and Water** (Eg: smart waste management, water conservation, utilization of solar power)

What are some examples of problems that might be addressed?

Below are some examples of smart city initiatives that may give you some inspiration:

- Remote physiotherapy provided by clinicians for patients diagnosed with Parkinson's disease via a remotely operated Smart Glove. This innovative solution was developed by the very first Grand Challenge High School Edition winners in 2022.
- Sustainable antibacterial and antibiofilm activity of engineered biocatalytic nanocomposites targeting biofilm cells and matrix for water treatment membranes. This innovative solution was developed by the 2020-21 TIGC winners.
- A smart navigation glove for motorcyclists embedded with Bluetooth technology connected to mobile phone navigation apps help reduce road accidents caused by the use of mobile phones by motorcyclists. This innovative solution was developed by the 2019-20 Grand Challenge winners.
- A Korean city implemented smart water meters, which today double functions as a social health alert: family of people who haven't used water in two days are sent an alert.
- Melbourne can get hot in summer and its tree health sensors measure the water needs and co2 conversion of the trees, the city council maintain the foliage that protects the city.

How can I win? What are the judging criteria?

The final judgement criteria will be:

1. Validity of the problem being solved (30%)

- How well is the problem defined and supported?
- Have the risks and opportunities of the concept been identified and assessed?

2. Originality and impact of the solution (30%)

- How unique is the solution?
- Impact: Is it an incremental improvement or transformative solution?

3. Commercialisation potential of the solution (30%)

- How thorough is the market analysis of similar solutions?
- How feasible is the solution to implement in real life?

4. Presentation quality (10%)

What are the key dates and deadlines?

Part 1

Applications: applications will be open from 15 October 2022 to 10 January 2023

End of first semester report submission: due February 2023

Part 2

Submission of final project: April 2023

Final event: To be confirmed (June 2023)

Is there a participation fee?

No, participation in the challenge is free.