# ASPIRE Rover Challenge 2022

# Detailed Challenge Instructions

The ASPIRE Rover Challenge 2022 is designed to motivate youths in Singapore to think out of the box and come up with innovative ideas on how to explore the moon using rovers.

# Challenge Statement:

An intelligent rover will be sent to the moon to achieve the following:

1. Explore the geology of the moon to see if there are valuable resources that can be extracted
2. Establish observation and environmental monitoring to ensure safe operations on the lunar surface
3. Establish communications between earth, lunar surface and orbiting assets

Propose a mission and rover design to achieve one of the above three goals

# Proposal:

All elements of the Proposal submission described below must be submitted by February 28, 2022, 6pm (Singapore Time). Submissions must be submitted using the online submission form.

Section 1: Team Information (Team may consist of 1-5 members)

1. Name of contact person
2. Current Education Level
3. Email
4. Mobile no.
5. Brief description of your key team members
   * Name
   * Email
   * Current Education Level

Section 2: Introduction

1. Title (Do not exceed 25 words)
2. Short Description (Do not exceed 300 words) - Brief description of the solution that may be shared on the website or other public platforms (Do not include any confidential information in this description)

Section 3: Your submission

1. Rationale for the Solution and Innovation
   1. Background of the proposed solution (500-1000 words) (image uploads allowed).
      1. What problem are you trying to solve and/or what are you trying to achieve (**objective**)
      2. Description and key features of the proposed solution may include:
         1. Mission
         2. Procedure
         3. Technical Considerations
         4. Timeline
         5. Anticipated Challenges
      3. Potential commercial application of your solution

Proposal should not exceed the suggested word count. Audio/video files, if any, should not exceed a total of 10 minutes.

Proposals are to be submitted using the following link:

https:/[/www.2](http://www.2aspiresg.com/)a[spiresg.com/](http://www.2aspiresg.com/)

# Assessment

The ideas will be assessed on

* Description – Level of detail and research
* Impact – Level of use cases
* Innovation – Level of creative thinking

# Prizes

Top 5 proposals will receive a programmable rover set (worth over $200) and a cash prize of $500