

# HYPERLOOP MANCHESTER

**THE STUDENT-LED TRANSPORT  
REVOLUTION**

**Information Package**

**Initiated by students at**

**MANCHESTER**  
1824

The University of Manchester

# Who are we?

**Hyperloop Manchester** is a multidisciplinary student-led Hyperloop project organization aiming to compete in the Hyperloop competitions and to share our knowledge with people around the world.

The team is founded in 2019. In 2020-21, Hyperloop Manchester has around 50 team members and around 30 alumni members from different nationalities and backgrounds. Furthermore, the team consists of two main divisions and eight subdivisions.



# Hyperloop Manchester Alumni

To keep our precious community and make our network bigger year by year, we have created **Hyperloop Manchester Alumni**. Hyperloop Manchester Alumni has old members who have contributed our team with their passion and knowledge. Our alumni members still help our current working team when it is needed.

We organise an Alumni event once a year. This gives our current members a chance to expand their network scope, chase some opportunities in different industries, and learn more advanced details regarding the Hyperloop concept.



HYPERLOOP  
MANCHESTER

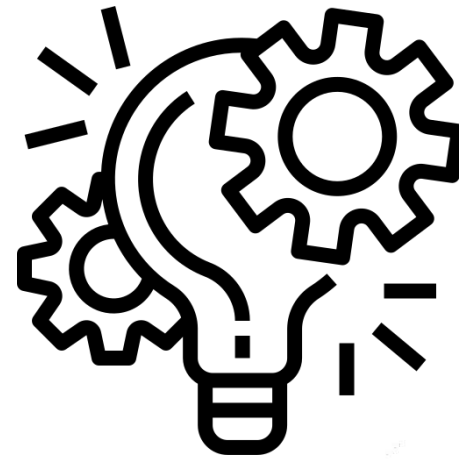
A L U M N I

# Purpose

As the University of Manchester students, we want to contribute our ideas by building a small-scaled Hyperloop model and highlight the name of the University of Manchester in this important innovation project. To do so, we would like to compete in the Hyperloop Pod Competitions organised by the esteemed organisations. Briefly, the purpose of Hyperloop Manchester is to build a technical team which will participate in the Hyperloop competitions.

Another prominent purpose of Hyperloop Manchester is knowledge-sharing around the world, inside and outside of the University of Manchester community. Therefore, we organise Masterclasses, which are delivered by our student team members, and Talks, which are delivered by the professionals who Hyperloop Manchester works with.

Besides, a strong research division is created aiming to explore the impact of Hyperloop on our world in terms of sociologically and scientifically by opening academic research programs for students and graduates at the University of Manchester.



# Accomplishments and Visibility

Appeared on Mancunion newspaper announcing our participation as one of the finalists in in European Hyperloop Week 2021

**Dec 2020**



Appeared on InTheHyperloop Youtube channel talking about our initiatives and goals for 2021

**Dec 2020**



Appeared on TEDxUniversityofManchester giving a brief of our Hyperloop-Graphene integration idea

**Mar 2021**



Appeared on Graphene Hackathon giving a brief of our Hyperloop-Graphene integration idea

**Apr 2021**



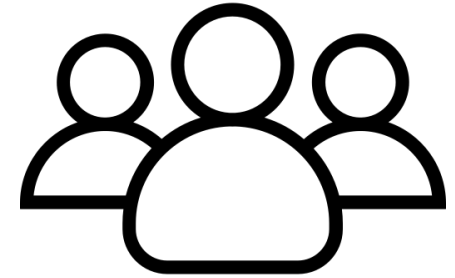
Participated in European Hyperloop Week 2021 and placed in Top 5 in the Best Levitation Design category and only team placed in Top 5 in any category from England

**Jul 2021**



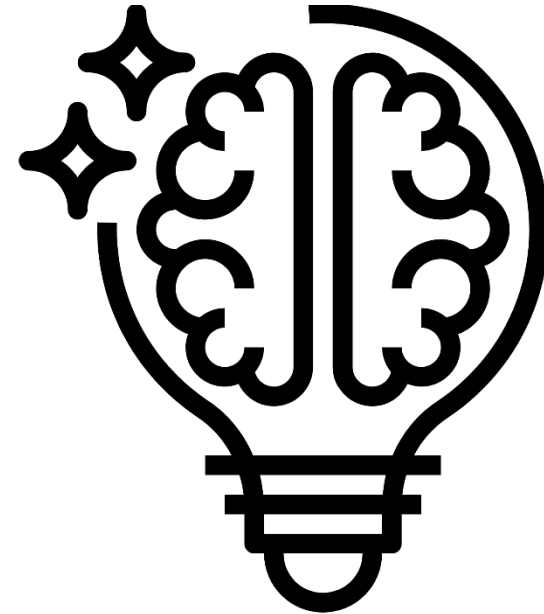
# Values

- **Diversity** – The team consists of around 80 members from multiple nationalities and different backgrounds. Hyperloop Manchester highly believes that the key to the solution to the problems comes from different ideas.
- **Teamwork** – This is the core of Hyperloop Manchester. Everything in Hyperloop Manchester is done with teams and collaboration.
- **Passion** – Everyone in Hyperloop Manchester is allocated in their teams according to their interests and passions. Therefore, every member is passionate about their involvement in the team.



# Values

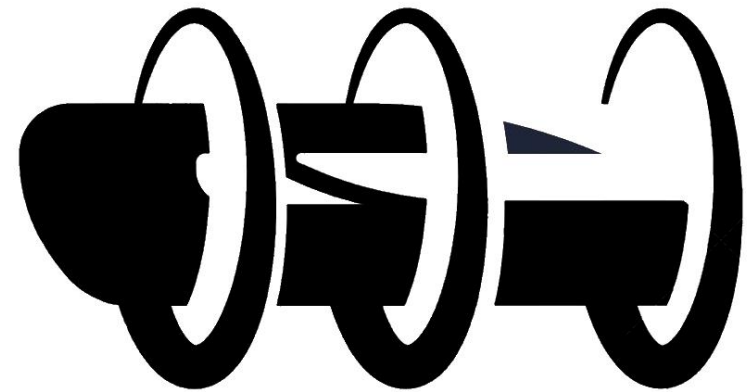
- **Creativity** – Tasks in the team are based on the creative ideas and solutions to improve the aspects of the Hyperloop pod.
- **Innovation** – The value that essentially depicts the team is “innovation.” The team always aims to implement innovative applications in the designed Hyperloop pod and do research to continuously improve the Hyperloop structure.



# What is Hyperloop?

**Hyperloop** is a proposed high-speed transportation system in which specialised pods are accelerated through a low-pressure tube to achieve high speeds. The system is intended to provide a more cost-effective and faster mode of travel between cities separated by distances less than approximately nine hundred miles.

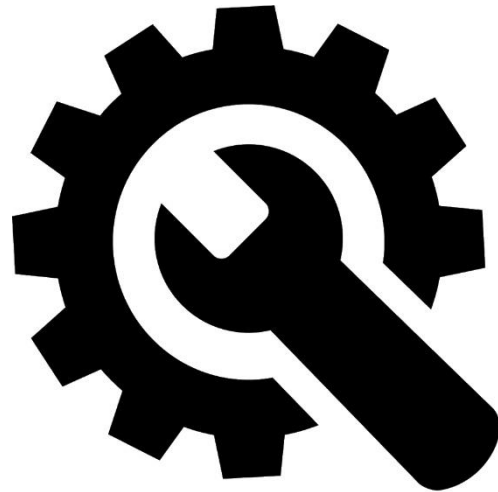
Around the world, this transportation concept is a major interest with companies, such as Virgin Hyperloop One, Hyperloop Transportation Technologies, Hardt Global Mobility, etc.



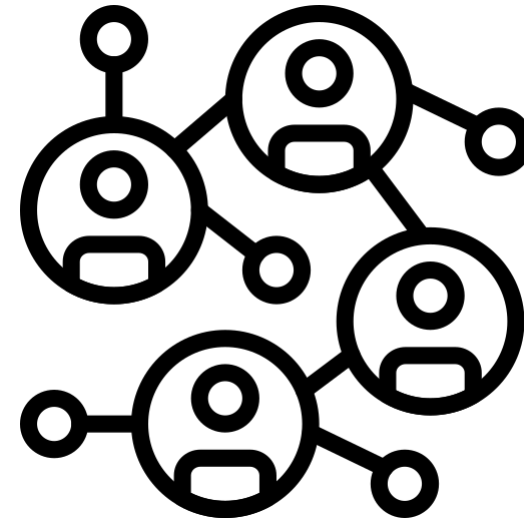


# Team Structure

## TECHNICAL TEAM



## BUSINESS TEAM



# Technical Team

Our Technical Team has been designing the pod by improving the technology and testing the implemented technical aspect of the pod.

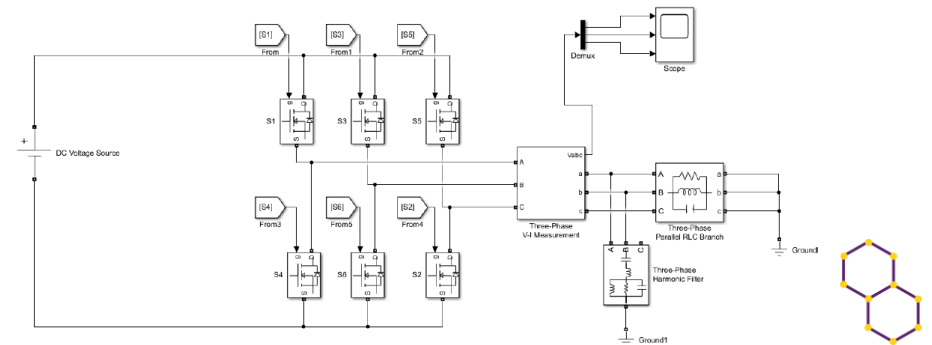
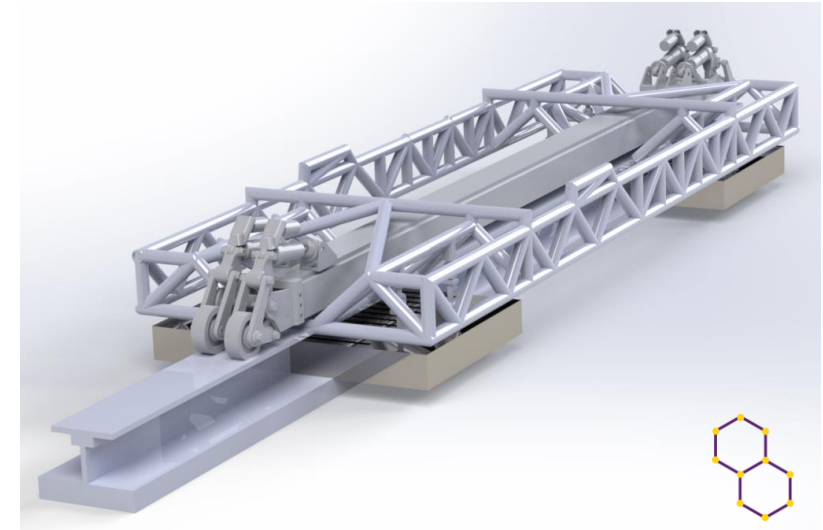
The Technical Team of 2021-22 will consist of 2 subdivisions:

- Mechanical
- Electronics and Software

(Details regarding the tasks of the subdivisions can be found on our website.)

Works of Hyperman I, our first Hyperloop pod, is going as planned even during the COVID-19 conditions. The design phase of the plan is about to finish. As soon as the facilities at the University of Manchester are open, the manufacturing of the pod will start.

Research and Technical sections are merged and researches will be conducted inside of Technical team this upcoming year.



# Business

Our Business Team is responsible for promoting Hyperloop Manchester around the campus, pursuing sponsorship opportunities, engaging students internationally to attract their interest to the concept of Hyperloop Manchester and emphasizing the social impact of STEM.

Our Business & Outreach Team consists of 3 main subdivisions:

- Marketing
- Sponsorship
- Human Resources

(Details regarding the tasks of the subdivisions can be found on our website.)

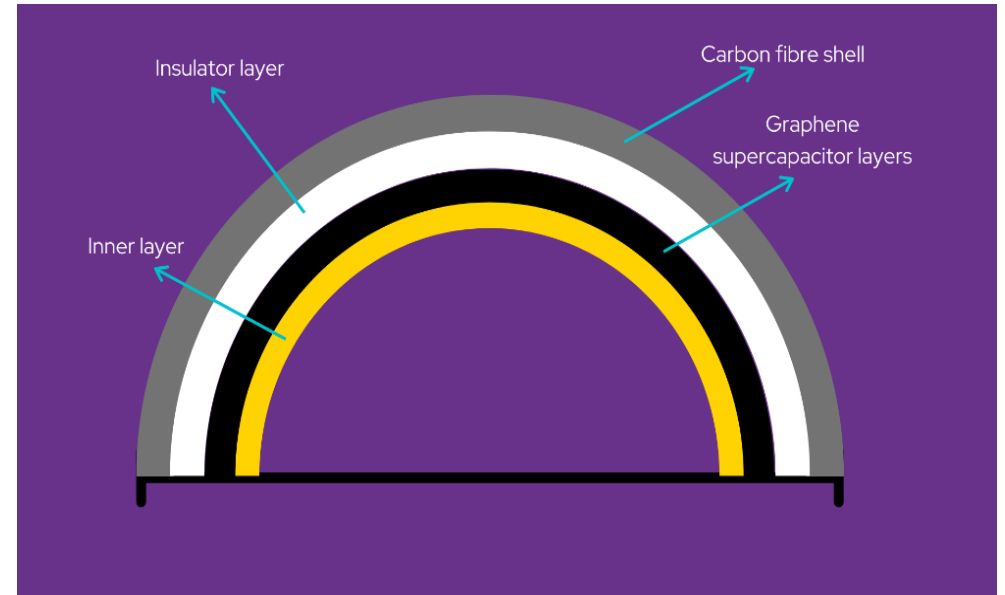
Besides, our Business & Outreach Team helps continue the recruitment process to enable us to keep growing in a more organized way.



# Hyperloop – Graphene Research

The reason why the team thinks that the graphene might be viable for the Hyperloop concept is the fact that graphene also can be used as a supercapacitor. Graphene has shown the most potential in supercapacitors as they can be used in the carbon coating on the capacitor plates to form an efficient electric double layer coating. These supercapacitors can be used to store large amounts of energy.

The team is currently working with GrapheneCR and Nixene Publishing and planning to work on creating a supercapacitor structure in the layers of the Hyperloop chassis. In other words, the team is working on placing sufficient amount of graphene supercapacitors as layers in the outer shell and cover the outer part with an isolator and the isolator layer with carbon fibre at the outmost level. **We are open to more partnerships for our research.**



## Pod: Hyperman I



# Sponsorship

## What we can offer

- Your company logo will be displayed on our pod, merchandise items, exposure on our social media accounts and our press posters. Since we are a newly established Hyperloop team and confident that our pod will be one of the best pods among the participants in the upcoming competition, we will feature in popular press platforms.
- With our participation in the global competitions, such as SpaceX Hyperloop Pod Competition, your logo will be seen by the students from the universities around the world.
- As we will include your logo on our merchandise, the young people will get to know your company in our international CSR events.

## What we need

- The budget that we aim to obtain is £200,000-250,000 which will afford all technical, commercial, outreach and research programmes.
- Besides this budget, we are seeking in-kind contributions, such as materials and components for the manufacturing of our pod and software licences.
- Furthermore, we are looking forward to having the support for our technical works and business needs, such as technical facilities or workshops to expedite our plan.
- Finally, collaboration opportunities with institutions and communities are very welcome.

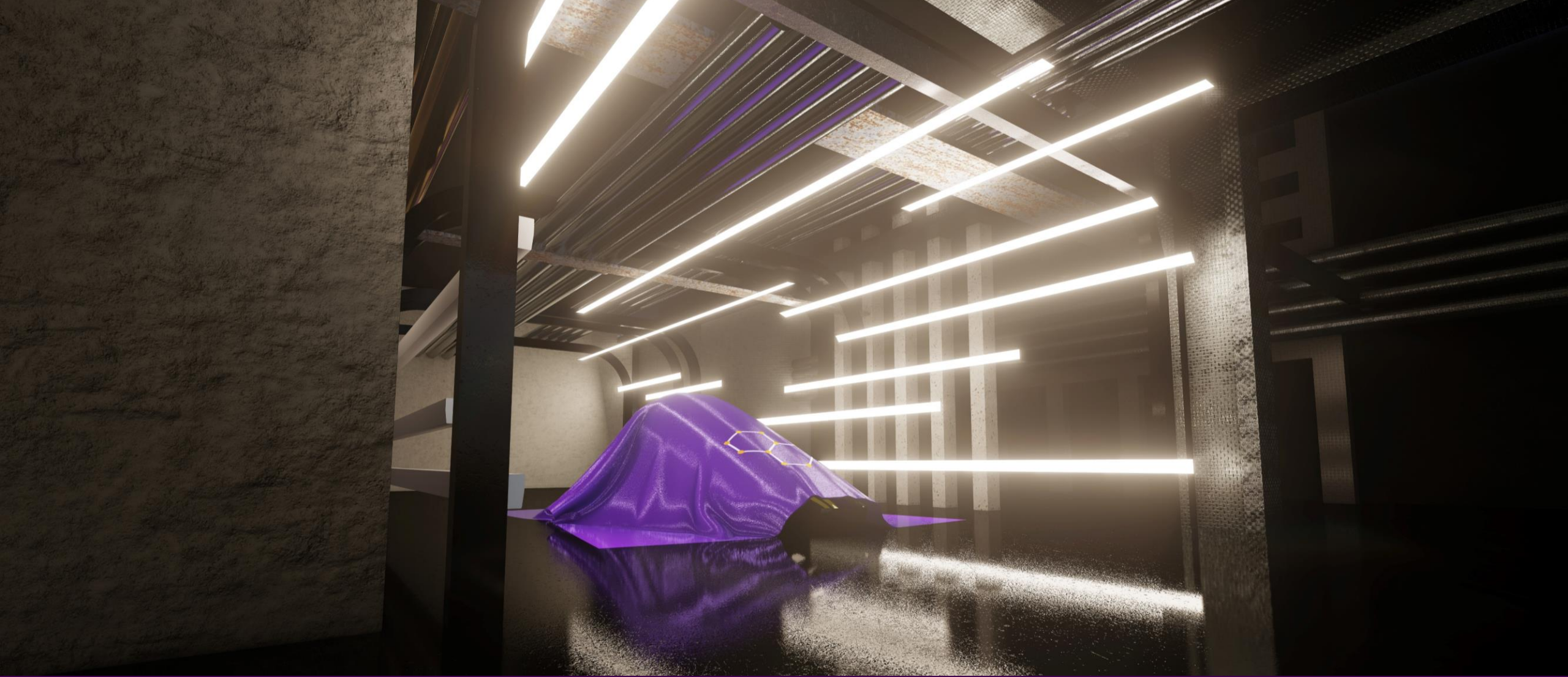
# Sponsorship Tiers

<u>Benefits</u>	<u>Sponsorship Level</u>			
	Platinum	Gold	Silver	Bronze
Access to CVs of committee members	✓	✓	✓	✓
Access to the progress report of Hyperloop Manchester	✓	✓	✓	✓
Invitation to Pre-Release event	✓	✓	✓	✓
Opportunity to invite team to present at company's event	✓	✓	✓	✗
Opportunity to use the prototype for corporate displays/events *	✓	✓	✓	✗
Opportunity to organise engagement sessions	✓	✓	✗	✗
Represent company to conduct STEM/Hyperloop programme in school	✓	✗	✗	✗
Tailored event	✓	✗	✗	✗
<u>Marketing &amp; Branding</u>				
Introduction of company on official website and social media	Full Page	Half Page	Quarter Page	Short Intro
Company's promotional video shared on social media	✓	✓	✗	✗
Logo displayed on ALL digital and physical materials	Largest	Large	Medium	Small
Brochures and buntings at events	✓	✗	✗	✗

# Current Sponsors







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