

CUBE and the winning student submissions from the 2023 edition

The Challenge for the Urban and Built Environment (CUBE) is an annual five-day workshop and competition for junior college, polytechnic and Institute of Technical Education students to gain first-hand experience as urban planners. Each CUBE edition is supported by architects, industry experts and student facilitators from the National University of Singapore's Department of Architecture to help the students gain real-world insights into the world of urban planning and design.

Outstanding Awards for CUBE 2023

Eco-industrial takes off (Eunoia Junior College)

Whether by boat, a skywalk or flying fox, we hope this future industrial site can enjoy a series of seamless and fun transport connections throughout. The landmark Jurong Hill Tower can be retained, and unique hawker dining experiences could be introduced around it. High-tech farms can also be included in this area to help enhance Singapore's food security.



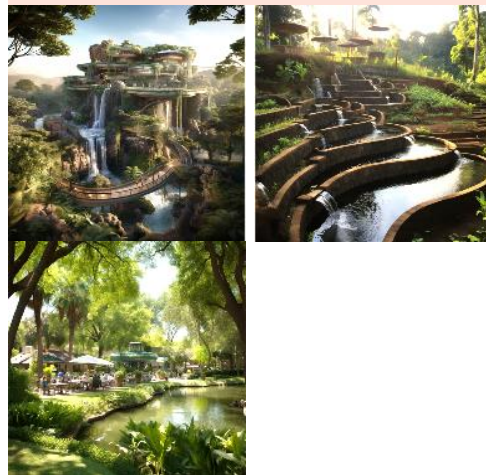
Top: The master plan for the site.

Bottom (left to right): AI-generated impressions of attractions such as the flying fox, the landmark spiral tower with unique dining experiences and a pedestrian mall.

(Image credits: Eunoia Junior College team)

Sustainable hub with majestic waterfall (Victoria Junior College)

Focused on sustainability, we envision this future industrial site to have green manufacturing companies and other related research and development activities located here. The buildings could be supported by a circular water system with terraced water catchments, a water treatment plant and rain gardens. A majestic waterfall and stream could serve as an anchor for the area, connecting to the nearby Sungei Lanchar canal.



Top: The master plan for the site.

Bottom (left to right): AI-generated impressions of the Majestic waterfall, terraced water catchments and lush green spaces.

(Image credits: Victoria Junior College team)

Merit Awards for CUBE 2023

Working in nature (Dunman High School)

We want to create a new form of working environment set in nature. Future buildings are envisioned to reflect the hilly terrain of the site where workers have views to lush greenery around. The site could serve as a hub connecting to other nearby industrial areas. It could become a green technology park, offering a green refuge for workers, their families, and residents in the area.



Top: The master plan for the site.

Bottom (left to right): AI-generated impressions of the green technology park, special architecture that can be introduced and an open-air food court.

(Image credits: Dunman High School team)

Multifunctional hubs fostering new ideas (Nanyang Junior College)

We envision this place to be a multi-functional hub where people can not only work here but be able to relax, gather and play here. Green spaces could be intertwined within and between the buildings with different types of spaces and gathering points for people to interact and exchange new ideas.



Top: The master plan for the site.

Bottom (left to right): AI-generated impressions of multifunctional buildings, the green monorail and a sports hub with a unique bird's nest-like roof.

(Image credits: Nanyang Junior College team)

**Work and play integrated
(National Junior College)**

We imagine an integration of work and play spaces in this future industrial site. Throughout the site, there could be a range of recreational facilities and amenities for workers and residents in the area including small islands created with boardwalks. It can be a place for people to relax and find respite.



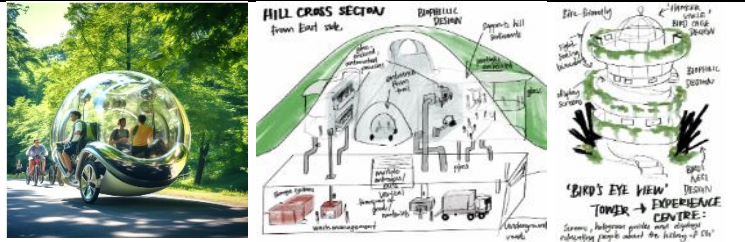
Top: The master plan for the site.
Bottom (left to right): An AI-generated impression of multifunctional green leisure spaces, the green Jurong Hill Tower that could have heritage storyboards and future buildings that could testbed new ideas.
(Image credits: National Junior College team)

**Industrial playground
(River Valley High School)**

In promoting and enhancing the wellbeing of workers and residents, we propose for this area to have a variety of leisure activities. The transportation network can include an extensive park connector for walking, cycling and can even serve as a testbed for innovative autonomous vehicles such as glass pods. A special pathway through buildings can be created for people to view and interact with the latest



innovative tools created by companies in the area.



Top: The master plan for the site.

Bottom (left to right): An AI-generated impression of autonomous vehicles as glass pods, a cross-section of buildings for people to learn more about the companies and an experience centre at Jurong Hill.

(Image credits: River Valley High School team)