


## More details on RoboSG! 2025

 **Where:** Punggol Digital District Nexus (Punggol Coast MRT, Exit 2)

 **When:** 15 March 2025 (Saturday), 11:15 AM – 4 PM

 **Free Entry!**

### **Hands-on robotics workshops**

Get creative at robotics workshops, where you can build robots, compete in robot soccer, navigate mazes with modular robots, and even learn about ROS (Robot Operating System). Take on problem-solving challenges and explore how robotics can be applied in real-world scenarios.

### **Experiential booths for the whole family**

The fun continues at experiential booths, where you can explore AI-driven healthcare solutions, interactive education showcases, and discover the latest digital innovations shaping Singapore as a smart city.

<b>Booth</b>	<b>Details</b>
Healthcare	Showcase of robotics and AI-driven solutions for rehabilitation, patient care, and medical assistance. These innovations enhance patient outcomes, reduce caregiver workload, and drive smarter, more efficient healthcare delivery.
Games	Play board games and go for chess try-outs facilitated by Damai's Board Games Interest Group and The Chess Interest Group of the Punggol Coast Community Sports Network! Punggol Coast Active Ageing Committee's Balloon Sculpturing Interest Group will also be showcasing their balloon sculpting works.
Education	Meet a humanoid robot that enhances rehabilitation through interactive AI and try your hand at 3D tic-tac-toe at SIT's booth. My First Skool will share how preschools foster a balanced digital diet and build healthy screen habits.
Technology	Get to know JTC's Open Digital Platform in PDD and meet start-ups in the digital and technology field.

### **Stage Activities**

On-stage entertainment will keep the energy high, with performances by Sparkletots, My First Skool, and Singapore Institute of Technology (SIT). Visitors can also put their engineering skills to the test in the 'Build the Tallest Robot Challenge.'

### **Insightful Talks on Robotics & Innovation**

For those eager to dive deeper into the world of robotics, insightful talks and fireside chats from Singapore University of Technology and Design (SUTD) Robotics Club, SIT, National University of Singapore (NUS), Nanyang Technological University (NTU) robotics programmes,

and SGInnovate will explore topics that cover sustainability in robotics, future educational pathways, and industry innovations.

**Programme**

<b>Time</b>	<b>Main Programme</b>
	11:15am onwards: Hands-on Robotics Workshops and Activities
11:40am	Stage Performances by Sparkletots (11:40am), SIT (11:50) , and My First Skool (12pm).
12:45pm	Robotics for sustainability sharing by SUTD Robotics Club (SOAR)
1:00pm	Talks on educational pathways by SIT (1pm), NUS (1:30pm), and NTU (1:45pm) robotics programmes
2:20pm	SGInnovate X dConstruct Tech Talk: Inside the life of a Robotics Engineer
3:15pm	Build the Tallest Robot Challenge
3:45pm	Closing Address
4:00pm	End of RoboSG! 2025

## Punggol Digital District Factsheet



Punggol Digital District (Credit: Darren Soh for JTC)

[Access all high-res photos in this factsheet here.](#)

- Singapore's first smart and sustainable business district that showcases our Smart Nation ambitions
- First district to offer a living lab for smart solutions through the Open Digital Platform
- Integrated with the Singapore Institute of Technology campus to create opportunities for applied learning with businesses in close proximity
- Features the Punggol Coast MRT station and an upcoming bus interchange that will provide better connectivity for employees, students and residents in the area
- Punggol Coast Mall is opening progressively from March 2025. A serviced residence / hotel facing Coney Island is also planned for the district

Master planned and developed by JTC, Punggol Digital District (PDD) is a 50-hectare smart and sustainable district that houses digital leaders in key growing tech sectors such as cybersecurity, artificial intelligence and robotics, fintech and smart living. 65% of space in its eight towers has been pre-committed, and tenants moving into the district include the Association of Information Security Professionals (AiSP), Cybersecurity Agency of Singapore (CSA), dConstruct, Delteq, Government Technology Agency (GovTech), OCBC Bank, United Overseas Bank and Wanxiang Singapore. Around 3.3 million square feet of business park and mixed-use spaces will open in phases from the third quarter of 2024. PDD expects to create 28,000 jobs closer to home for more than 160,000 Punggol residents and those in the north-east region.

With its digital backbone – Open Digital Platform (ODP), the district is designed as a living lab to welcome participation in creating future smart solutions.

### Open Digital Platform: Smart Operating System of PDD

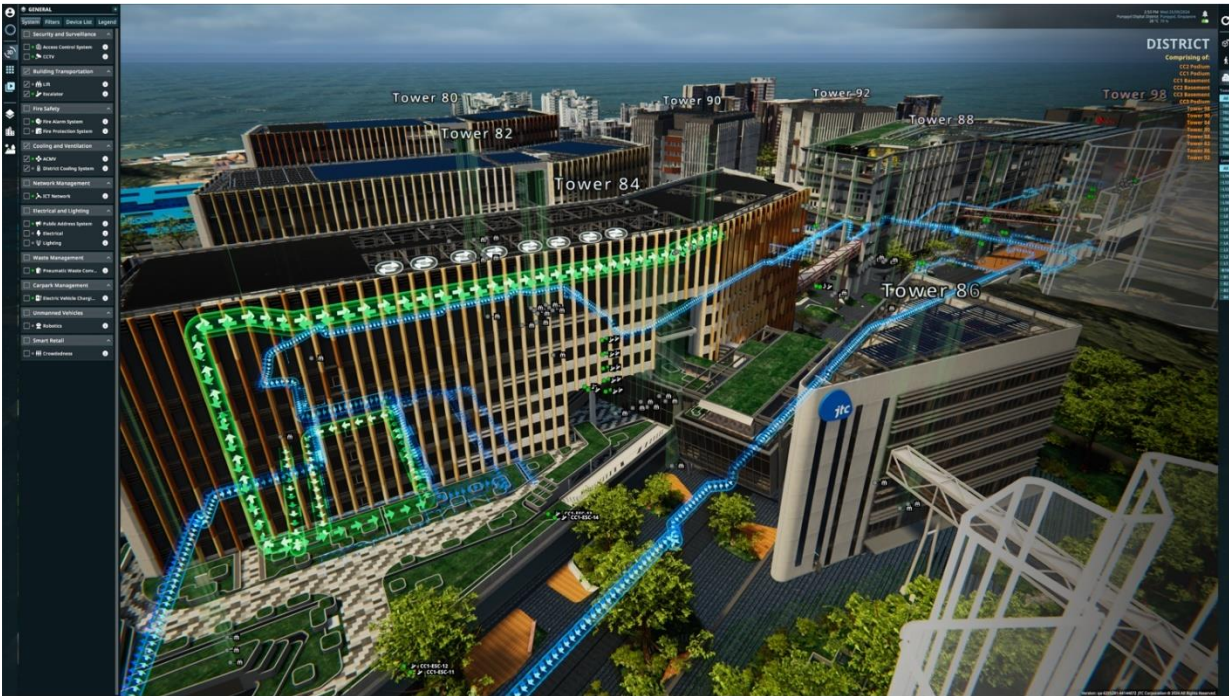


Illustration of the Open Digital Platform presenting a 3D digital twin of PDD (Credit: JTC)

PDD will be Singapore’s first business park to offer businesses “plug and play” digital infrastructure through the Open Digital Platform operated by JTC. As a platform connected to a network of sensors and systems, the ODP will collect data such as building and district data (e.g. lifts, lighting, mechanical and electrical systems and occupancy) and environmental data (e.g. temperature and rainfall) which will be utilised to optimise operations. With machine learning and AI technologies built in, data collected across sensors and systems are further analysed, allowing real-time changes for energy optimisation and proactive facility management.

With the repository of real-time district data, the ODP is also able to create a digital twin that allows businesses and students to perform simulations and rapid prototyping in a risk-free and lifelike environment, reducing the cost of experimentation and time-to-market.

## **Strong Industry-Academia Collaboration**

PDD is home to the Singapore Institute of Technology (SIT)'s new campus with 12,000 students and 500 academic staff, including faculty and professional officers. The co-location of SIT's campus with the business park buildings in PDD will provide students with a full-fledged applied learning environment, while businesses will have access to young talents at close quarters.

As an Enterprise District, there is flexibility to curate different uses within PDD – for instance, SIT's learning and industry engagement facilities can reside within JTC's business park buildings while JTC's commercial activities could be hosted within SIT's campus. This 'exchange' of spaces creates greater synergies between academia and businesses to collaborate, create, testbed and prototype new ideas and innovations.

## **Sustainable District Management**

Comprising JTC business park and the SIT Punggol Campus, Punggol Digital District is the largest Green Mark Platinum mixed-use district in Singapore. Passive design strategies and advanced mechanical and electrical systems will enable the district to achieve 35% reduction in operational carbon emissions yearly, equivalent to taking 4,000 cars off the road.

The car-lite district hosts 17 Green Mark Platinum buildings including 3 Super-low Energy buildings. One of the buildings is the tallest industrial building in Singapore constructed using timber. The eight-storey building achieves an embodied carbon performance which is 98% lower than the benchmark level set for non-residential buildings.

PDD will house Singapore's first urban district-level smart grid as well as integrated utilities such as an interconnected district cooling plant with a combined cooling capacity of over 30,000 refrigeration tons and an underground pneumatic waste conveyance system. Across the district, solar panels will be installed across rooftops producing over 3,000 megawatt hours of clean energy annually, equivalent to the annual energy consumption of 11,000 three-room Housing and Development Board flats.

PDD is designed to be car-lite and fully walkable. Its main roads are located at the edges of the district, while vehicular access roads, shared carparks and other service driveways are located underground. In its first phase, the district will have 96 electric vehicle charging lots, with electrical provisions built to ramp up to 151 lots in tandem with market demand.

PDD features 40% green coverage and 100% Landscape Replacement Area targets. The old Punggol Road is being pedestrianised into a 1.3 km Punggol Heritage Trail, with conserved fruit trees and its original feature of undulating terrain. Parts of the site's natural vegetation will also be retained as part of the community park. Rooftop urban farms are being prototyped in the business park in future phases. Across the district, bioswales and rain gardens will capture rainwater for landscape irrigation and other uses. This is estimated to save 208,000 cubic metres of water annually, enough to fill 83 Olympic-sized swimming pools.

As an environmentally sustainable business park, the district aims to achieve 30%-40% higher energy efficiency than standard commercial buildings. With the use of artificial intelligence and machine learning, buildings could achieve up to 60% energy savings.

## **Community Playground that Connects People & Nature**

The future of Punggol will not be all about technology and infrastructure. PDD will be integrated with the surrounding residential areas, designed with green links to the waterfront where people can engage in lifestyle and recreational activities. There will also be new vibrant public spaces with retail, dining and leisure options for the community to relax and unwind.

Punggol Coast Mall is opening progressively from March 2025. Spanning over 290,600 sq ft with more than 120 stores, the mall stretches across the first and second storeys of three buildings in Campus Boulevard. Tenants include McDonald's, Starbucks, MUJI Cafe&Meal, Amore, Paradise Hotpot, and BreadTalk.

Set to open in the second half of 2025, the Market Village in PDD will feature waterfront dining and lifestyle offerings. There will also be community facilities in the various buildings, including three childcare centres with capacity for 1,000 children, a 680-seat hawker centre and a community club.

For more information on PDD, visit <https://estates.jtc.gov.sg/pdd>.

## **About JTC**

Since its inception in 1968, JTC has played a strategic role in ensuring Singapore stays innovative and dynamic amid global manufacturing trends.

As a government agency under Singapore's Ministry of Trade and Industry, JTC is paving the way forward for Singapore's industrial landscape with green and smart estate masterplans such as one-north, Seletar Aerospace Park, Jurong Innovation District, and Punggol Digital District. Our estates attract new investment and foster collaborative ecosystems that strengthen Singapore's position as an advanced manufacturing hub. We also drive innovation in the Built Environment sector by piloting new construction technologies. For more information on JTC, visit [www.jtc.gov.sg](http://www.jtc.gov.sg).

## Photographs and Artist Impressions

### 1. 3-in-1 Integrated Development



(Credit: JTC)

PDD features a unique 3-in-1 design which integrates a business park, a university campus and an underground MRT station. Building all these at the same time as an integrated development is the first of its kind for Singapore.

## 2. Aerial View of Punggol Digital District



(Credit: JTC)

PDD is a smart and sustainable business park that anchors business innovation and activity in Punggol town. Master planned and developed by JTC, with WOHA as the master plan designer and lead consultant from planning to construction, PDD will house a creative ecosystem and is a living lab for cybersecurity, smart living and smart estates solutions. The co-location of SIT's campus with the business park buildings in PDD provides students with a full-fledged applied learning environment, while businesses gain access to young talents at close quarters.



### 3. Campus Boulevard



(Credit: Darren Soh for JTC)

An 800m pedestrianised street between SIT campus and JTC's business park buildings that provides a direct connection from the Punggol Coast MRT station to various developments in PDD and the waterfront.

#### 4. Collaboration Loop



(Credit: JTC)

Sky linkways connecting SIT and JTC's business park buildings foster exchanges between university and industry.

#### 5. Heritage Trail



(Credit: National Parks Board)

The existing Punggol Road is being transformed into a 1.3 km pedestrianised Punggol Heritage Trail, connecting Punggol Waterway Park to Punggol Promenade Punggol Point Walk. Existing greenery has been conserved to protect the area's unique topography, retaining its rustic charm.

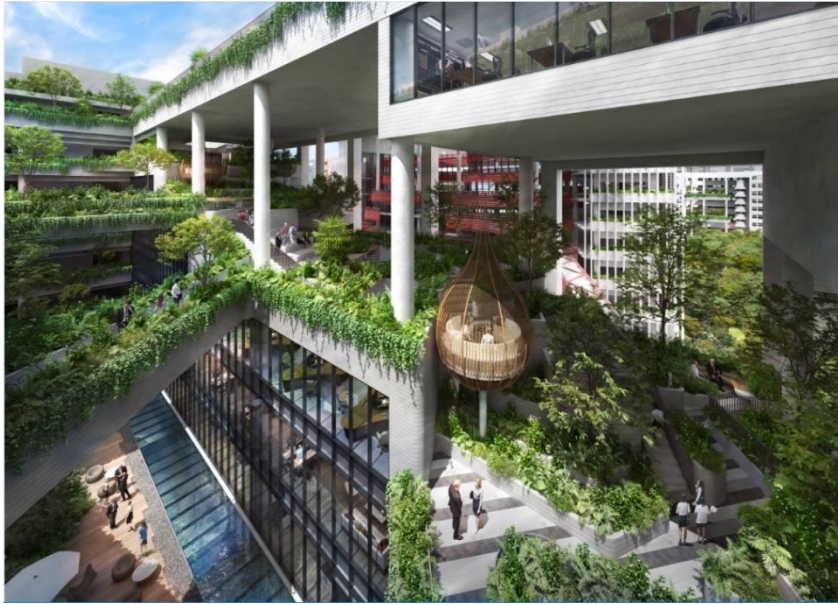
## 6. Market Village



(Credit: JTC)

Located along the waterfront, the village will have retail, dining, and leisure options, as well as public event spaces for the community to enjoy, relax and unwind.

## 7. Sky Terrace Gardens



(Credit: JTC)

Lush greenery with pod-like spaces for businesses and students to gather.