

NTU students can soon hop on driverless shuttle bus across campus

In a few months, rushing to class could mean hopping on a driverless shuttle bus for Nanyang Technological University (NTU) students.

The vehicle, which can travel at speeds of up to 40kmh, will carry 24 riders on a 500m route connecting student halls with the main academic areas.

Ferrying up to 300 passengers a day, it will encounter obstacles such as pedestrians and traffic, all vital input for the machine to learn how to get around in the real world.

Yesterday, NTU signed an agreement with Dutch company 2getthere and SMRT Services – the transport operator’s operations and maintenance arm – to introduce the buses to NTU’s campus.

In April 2016, SMRT formed a joint venture with 2getthere to bring driverless vehicle systems to Singapore and the region, acquiring a 20 per cent stake – worth \$6 million – in the Dutch company later that year.

Since November last year, the bus has been tested along a

350m route between two student halls on the NTU campus, safely carrying about 4,000 passengers in total.

There are plans ahead for it to eventually traverse the entire campus and beyond – connecting NTU to neighbouring CleanTech Park.

To help it “see” its way around, the bus is equipped with cameras as well as lidar (light detection and ranging) and ultrasound sensors.

Small magnets embedded in the road act as navigation guides.

The vehicle can get through heavy rain and knows to avoid pedestrians, said 2getthere chief technology officer Sjoerd van der Zwaan.

The autonomous vehicle will also be integrated into Jalan-Jalan, an app that integrates various transport modes such as e-scooters and shuttle buses on campus.

The app – developed by start-up mobilityX – is being tested at the NTU campus and CleanTech Park.

-ZHAKI ABDULLAH



A driverless shuttle bus serving NTU students. TNP PHOTO: **KHALID BABA**