

Archinect

Editorial & News Features

News Events

Competiti

Employment

Community

Academia

About

Login / Join

Toyo Ito completes work on the largest mass timber building in Asia

By Josh Niland May 23, '23 6:00 PM EST

🗩 0 🛛 🗣 Follow 🚱



Image courtesy Nanyang Technological University, Singapore via Facebook

Toyo Ito has shared a video update at the conclusion of his firm's monumental academic building project, titled "Gaia," for the Nanyang Technological University (NTU) in Singapore.

The completed mass timber design is now reportedly the largest of its kind in Asia, topping out at six stories and a total of 468,000 square feet. It is the new home of NTU's Business School and comes equipped with a 190-seat auditorium, 12 large lecture halls, seminar rooms, laboratories, graduate student and faculty offices, and multiple classroom spaces.

Bricks held over from the former NTU Innovation Centre were also repurposed as a decorative wall inside the new structure. The design recently garnered the Building and Construction Authority of Singapore's Green Mark Platinum (Zero Energy) building award for its impressive sustainable performance metrics, which led to over 2,500 fewer tonnes of carbon dioxide being used per year.

▲ Submit
Share/Follow



Image courtesy Nanyang Technological University, Singapore via Facebook

Another 516,000 kilowatt-hours (kWh) of energy are produced thanks to an array of PV panels installed on the building's roof. A passive heating, cooling, and ventilation system is also enacted to further its green credentials. Sun shading fans and open-air terraces are also included along the facade. Finally, newly-planted trees provided carbon offsetting to the tune of 5,2000 tonnes per year.



Image courtesy Nanyang Technological University, Singapore via Facebook

"The building was designed to connect humans to their natural surroundings," NTU President Ho Teck Hua described at its opening. "Students and faculty benefit from the extensive open spaces for study and collaboration. The spaces have ample natural light, creating an environment conducive to social interaction. People will experience first-hand what it means to work, learn, and socialize in a sustainable environment."

The 2013 Pritzker Prize-winning Japanese architect had previously completed a pair of dormitory buildings and a sports hall for the over 32,000-student university, along with several other prominent designs spread throughout the city-state, including the VivoCity shopping center and windcatcher-topped 2014 CapitaGreen Tower in the city's central business district.

A video walkthrough of the project can be viewed below.



Video courtesy NTUsg/YouTube