Nanyang Technological University (NTU) has unveiled plans for its upcoming S$180m (US$138m, £99m) business school, which – on completion in 2021 – will become the largest wooden building in Asia.

The six-story, 40,000sq m building – part of the administration’s desire to construct the “greenest university campus in the world” – will be co-designed by RSP Architects Planners & Engineers and Toyo Ito & Associates Architects.

RSP said the objective behind the design is "to create a world-class large-scale timber building which inspires the human senses and stimulates learning".

The new structure will use mass-engineered timber (MET), a sustainable, responsibly sourced wood product, which has been lauded by Singapore’s Building Construction Authority for its improved structural integrity. The university said the material will be prefabricated on site, meaning that it will be comparatively less pollutive and more energy-efficient than traditional construction methods.

The new addition to the campus will bring the university even closer to its goal of reducing its ecological footprint, as 95 per cent of its buildings are already certified Green Mark Platinum.