Student's Build Solar Car with 3D Printed Body

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Students at Singapore's Nanyang Technological University have built an urban solar electric car with a 3D-printed body, the university said on Monday.

The car named NTU Venture 8 is mounted on a carbon fiber single shell chassis. The cars were designed from scratch and the students spent over a year to build them.

The students used the latest engineering techniques to develop innovations such as silicon solar cells that can be contoured to follow the car's shape.

"We are extremely proud to have designed and assembled a 3D- printed body shell for the electric car," said Ng Heong Wah, an associate professor at the university. "The 3D printed car body was pushing existing technology to the limits and we are so pleased that it has paid off."

Students said that they used the 3D-printing technology to build the cabin from lightweight plastic so as to maximize the internal space and driver's comfort while still being able to keeping the weight to a minimum. Despite being an urban concept car, it can reach a top speed of 60 km/h, while maintaining low energy consumption.

The students will take the NTU Venture 8 to participate in the Shell Eco-marathon Asia competition this year, under the Urban Concept category. Teams with more "roadworthy" fuel-efficient vehicles fall in this category, it said.

The students also built the NTU Venture 9, a three-wheeled racer, which can "take sharp corners with little loss in speed" due to its unique tilting ability inspired by motorcycle racing, the university said. It features hand-made silicon solar cells and will be in the Prototype category at the Shell competition.

Source: Xinhua