NTU Ramps Up 3D Printing With $30 Million Research Center

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AsianScientist (Sep. 16, 2013) - Soon, life-saving body parts such as corneas, skin and heart tissue may just be a click away, thanks to a new S$30 million 3D printing center at the Nanyang Technological University (NTU) in Singapore.

The new NTU Additive Manufacturing Center (NAMC), supported by Singapore's Economic Development Board (EDB), will have the latest 3D printing machines, such as laser-aided machines for building metal parts and objects for industry, and bioprinters which are able to print human tissues.

Additive Manufacturing includes processes that can create 3D products from computer-aided design models by adding materials in a layer-by-layer fashion, much like how current printers print ink on paper. As opposed to conventional manufacturing processes such as machining, casting and molding, this modern fabrication process can handle complex designs and changes easily without incurring additional costs.

Researchers at the 300 square meter center will work closely with the manufacturing industry on R&D projects to develop new materials, software and processes leading to commercial applications.

Singapore's first 3D printing competition

To spark interest in 3D printing in students and the public, the center will host Singapore's first international 3D printing competition with top prizes worth $10,000 each.

The Singapore International 3D Printing Competition 2013 will have two categories: one for wearable modern fashion and the other for designing the abacus. Although poles apart, these two categories were conceptualized to reflect the vibrant mix of cultures in Singapore, a place where East meets West.

The competition, held by the center and NTU's School of Art, Design and Media, is now open for both local and international submissions and will close on November 1, 2013.

Besides spearheading cutting-edge research, the center will also groom engineering talent and manpower for the industry, through PhD and Master's programs specializing in Additive Manufacturing.

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