The University at Buffalo has received what school officials say is the largest gift in its history, and engineering students there are using the donated software to make virtual children's toilets.

And portable CD players. And internal-combustion engines for cars. And catapults.

Students in UB's School of Engineering and Applied Sciences already are using the cutting-edge computer-aided design, or CAD, software donated to UB by Electronic Data Systems, one of the world's largest providers of information technology services.

"It gives us an opportunity to teach students what actually happens out in industry," said Ashwin Gurnani, a UB graduate research assistant in mechanical engineering.

The software, valued at $53.5 million by EDS, is the single largest gift in UB's history, and puts the university over the top for its current $250 million fund-raising campaign, school officials said.

The software gift was announced Thursday at a North Campus news conference.

The Texas-based EDS donates software to universities because it wants to ensure that the nation's future engineers are trained in the most current technology available, said Hulas King, director of global strategic partnerships for EDS.

"It's good business sense, and it's also good community service to the academic institution," King said in an interview.

EDS has worked with UB since the early 1990s on smaller projects, and it was that relationship - and UB's proposal for integrating the software into its curriculum - that clinched this current donation, King said.
UB has been using the software in undergraduate programs, and about 700 students will use the software in 10 or 12 courses this fall, said Mark H. Karwan, UB's engineering dean.

The software can be used by students at a range of levels.

For example, students in a sophomore-level course this spring learned how to build computer models of the components of basic commercial products, including the Fisher-Price Royal Potty for kids.

Students took apart the plastic toilet, used EDS software to make models of the pieces, and then had to put the virtual and actual pieces back together, said Kemper E. Lewis, an associate professor of mechanical engineering.

The students can use the software to test how much weight the toilet can support, among other properties, before it would be built, Lewis said.

Advanced engineering students used the software to simulate motion and test their concepts for an experiment that required them to build working catapults, said Rajan Bhatt, a graduate student in mechanical engineering.

UB students have just begun to explore the potential of the EDS software, said Venkat Krovi, an assistant professor of mechanical engineering, who wrote UB's proposal to EDS.

King said $53.5 million is what a corporate client would have to pay for the software. UB received 60 licenses with the software.

Prior to this, the largest gift given to UB by one organization or person is the $11.8 million donated by the John R. Oishei Foundation over the course of UB's current campaign.

UB officials said the software gift puts total donations for the campaign, which began in 1996 and ends Sept. 12, at $281.8 million.

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