## Students have a blast with truss-busting competition

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From left, Erin Shanley, Lindsay Pristou and Max Wendell prepare their truss for its weight check during the "truss-busting" competition held April 18 on the uptown campus. (Photo by Sally Asher)

Students enrolled this semester in the course Statics experienced a creative way to analyze the effects of force: They designed and built trusses, or frameworks, as part of a competition to see who could design the lowest weight structure that bears the most weight.

To prepare for the "truss-busting" competition students used <u>MakerSpace</u>, a workshop on Engineering Road on the Tulane University uptown campus.

All first-year students majoring in biomedical engineering and engineering physics at Tulane University must complete Statics as a prerequisite for other courses in the program. A few upperclassmen are also enrolled in the course.

"The students can use one sheet of wood for the laser cutter in the MakerSpace," said Katherine Raymond, a professor of practice in the <u>School of Science and Engineering</u>. "It must support 20 pounds, but the prize goes to the structures that hold the heaviest load."

The competition provided an opportunity for the students to become familiar with MakerSpace, a 4,100-square-foot facility with laser cutters, 3-D printers and other design tools. MakerSpace is open to anyone in the Tulane community.

Raymond said the feedback from the students confirms that they had a blast participating in the "truss-busting."

This year's winners were:

The Barrios Squad (supporting 263.1 pounds) — Ryan Liberman, Matthew Testore, Kyle Graesser and Will Nelson

Team JAMS (best load-to-weight ratio) — Stephen Hahn, Jackson Levine, Arjun Sree-Manoj and Mostafa Meselhe

Team Five (best calculation accuracy) — Avery Kravitz, Bailey Ruesch, Morgan Bohrer, Chase Doumite and Luke Ford

The competition took place Tuesday, April 18, in the Lavin Bernick-Center's Qatar Ballroom and preceded the Tulane Engineering Design Expo held April 20 on the uptown campus. The expo is held annually and provides an opportunity for seniors to display and explain their yearlong design projects.

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