

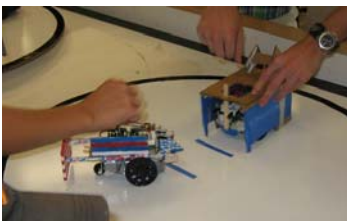


The Freshman Class

For the past 10 years, Beloit College has published a mindset list of things that shape the entering freshman class. The introductory paragraph for this year was “If the entering college class of 2013 had been more alert back in 1991 when most of them were born, they would now be experiencing a severe case of déjà vu. The headlines that year railed about government interventions, bailouts, bad loans, unemployment and greater regulation of the finance industry. The Tonight Show changed hosts for the first time in decades, and the nation asked ‘was Iraq worth a war?’” The full list is at <http://www.beloit.edu/mindset/2013.php>. With regard to UT, our freshman engineering enrollment is 463 students, which is slightly down from last’s years peak. We are pleased that minority enrollment is up. The average Math ACT is 28.9.

Governor’s School for Science and Engineering

Will Schleter taught the morning sessions of the five-week Governor’s School. 27 students participated, with 12 being female. The students completed the equivalent of EF 105, Computer Methods in Engineering Problem Solving. They also had two team projects. The first was a Rube-Goldberg team project, with the additional twist that each team’s project had to trigger the next team, teaching the students to not just work in teams, but to work with other teams. The second project was Boe-bot robots. Students learned to assemble the robots, program them, use different sensors, and then complete a maze and compete in a “Sumo”



wrestling match, pitting robot against robot to see who could knock the other robot out of the ring the first.

Engineering Diversity’s Pre-College Summer Program

The College of Engineering has a long history of diversity programs, with the Minority Engineering Program being established in 1973.



One aspect of this program is a pre-college summer program. This past summer, Dick Bennett introduced rising 8th graders and rising 9th graders to engineering. The students built newspaper bridges, one of which held over 100 pounds. They built shooters to learn about projectile motion, and also worked with fuel cell car kits. We spent 45 minutes teaching them drawing through Google Sketch-up, and then added the drawings to



Google Earth. In addition to engineering, the students had classes in math and computer science.

Featured Problem (from EF 151 homework): On a bright sunny afternoon in the Knoxville park, a 5' 5" person measures their shadow to be 11.5' long. Assuming the sun rises at 6 am and sets at 7 pm, how many more minutes of daylight are left?

Answer: 109 minutes