

Utica High School seniors Zach Elie (front) and Sebastian Sznitka lower robot into the pool.

ROVs Go Underwater

Students at four high schools are making a name for the Utica, MI, Community Schools (UCS) in robotics circles.

The students — a dozen of them in the 2009-2010 school year — are part of the Technical Underwater Robotics Research Engineering Team (TURRET) that designs and builds a remote-operated vehicle, or ROV, to enter into a regional competition with other schools. The competition tests the ROV's ability to not only race across a pool bottom, but also to complete rather complicated tasks, such as navigating a small tunnel, taking a temperature reading with a probe or opening a hatch of a small submarine, looking inside and "rescuing" an item there.

In 2009 and 2010, TURRET won the regional title and qualified for the international competition. In 2010, that competition was held at the University of Hawaii at Hilo, and all of the team members attended.

The trip to Hawaii was rewarding, says Scott Palmer, UCS administrator for career and technical education, but the greater benefit is the opportunity for the students to see the application of their coursework. "There's a tremendous amount of math and science involved, and part of the competition has to do with a technical presentation and a technical report, so that includes English language arts," he says. "We strive so much to talk about rigor in our academic programs, so to be able to apply math, science and English language arts to something tangible and practical is certainly something the students will need throughout their lives, regardless of whether they go into engineering or not."

For more about TURRET and other ROV teams, visit www.enterprise.mtu.edu/highschool/currentteams/0910teams.html.