



Engineering a win

UB school posts impressive gains

By ALEXANDER SOULE

As managing engineer on Egypt's Aswan Dam, Tarek Sobh's father helped create one of the great engineering feats of the 20th century.

The junior Sobh appears to have managed his own engineering feat in Bridgeport – creating a reservoir of engineering talent at the city's namesake university that just a generation ago nearly drowned in a sea of red ink.

The University of Bridgeport swept the “poster” competition at the American Society of Engineering Education regional conference, held last month at the U.S. Military Academy at West Point. Ayssam El-Kady, a doctoral candidate in computer science and engineering, won top honors for his project on the modeling and control of a Cartesian parallel manipulator – essentially a robot arm with a free range of motion in all directions.

“I called everyone I knew,” Sobh said. “It was just amazing.”

For Sobh, himself a robotics expert who advised El-Kady, the West Point victory comes against a backdrop of a forced march by the University of Bridgeport's engineering school that is amazing in itself – the school has quadrupled the size of its engineering student body in just four years to 1,300 students.

Only a few schools nationally can match that growth rate this decade, according to William Kelly, a spokesman for the American Society for Engineering Education. The schools are George Washington University in Washington, D.C., George Mason University in Fairfax, Va., and Florida Atlantic University in Boca Raton, Fla.

What's more, the school appears not to have suffered declines in data used by admissions departments to gauge a school's appeal. For last year's entering class, the University of Bridgeport accepted 76 percent of applicants applying to its graduate programs in engineering, with just over 400 enrolling for a yield of about 17 percent. That is slightly below last year's yield

but still ahead of every year this decade.

“The programs are staffed primarily with adjunct faculty which gives the institution a lot of flexibility,” Kelly said. “What (the University of Bridgeport) has done is ... almost entirely with international students, and I think this is possible with targeted recruiting.”

Premier engineering programs such as those at the Massachusetts Institute of Technology and the University of Texas also admit a high percentage of international students, who crave U.S. student visas for specialty academic programs and potential business contacts that can lead to work visas.

Those students, in turn, can serve as alumni ambassadors in their home countries, hopefully increasing the odds of attracting a higher caliber student in future generations. And work-force development organizations hope some will stay on and obtain citizenship, offsetting a possible shortfall in high school graduates pursuing engineering careers.

“We’ve been working at making this happen for a couple of years – doubling our faculty ranks, traveling a lot, (and) encouraging our faculty to network internationally,” Sobh said.

Since last summer, Sobh himself has traveled to Brazil, Germany, India and his native Egypt – in some cases for conferences that allow for recruitment activities on the side – and plans this spring and summer to trek to China, Oman, Portugal, Saudi Arabia, and the United Arab Emirates.

Despite the wear and tear on Sobh’s passport, University of Bridgeport President Neil Albert Salonen said the school is not sacrificing local and domestic recruitment at the global altar. Salonen’s own son obtained a degree in industrial design from UB last year, and is employed at the Oxford-based industrial design company Nexus Design L.L.C.

Salonen will hand diplomas to 1,200 University of Bridgeport graduates on Saturday May 10. In addition to a commencement address by Clement Malin, a former Texaco Inc. expert on geopolitical aspects of the oil industry, Nigerian graduate and medical-school candidate Farida Kwaji is scheduled to speak.

Salonen is looking forward to meeting the student that will take Kwaji’s spot in next year’s entering class.

“We’re trying to build the school around winners,” Salonen said.