

EQUALITY BY DESIGN



Phil Noel/Connecticut Post

Engineering Professor Elif Kongar, here standing behind the equipment, shows her engineering students, from left, Prerita Manandhar, Subrina Thompson and Pragya Rajauria, around the robotics lab at the University of Bridgeport.

The numbers are building for women in engineering

By **ROB VARNON**
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There are 142 women enrolled in graduate programs at the University of Bridgeport School of Engineering. That's a significant increase from days gone by — more than 200 percent from a year ago, alone — but should the number of women heading into this male-dominated field surprise anyone?

For four women, including Engineering School Professor Elif Kongar, the answer is both yes and no.

Yes, Kongar and others agreed, because, despite a long history showing women excelling in scientific and mathematical fields, there remains a perception women aren't suited for engineering careers.

No, because from a statistical standpoint, there are far more women going to college, and thus in a position to become engineers, than men.

Since the early 1990s, according to the U.S. Department of Education, women have outnumbered men when it comes to going to college and earning degrees. But there has remained a large gender gap when it comes to the sciences, according to the Education Department.

At UB, its graduate program has almost 900 students, 142 of whom are women. That's still just 16 percent.

So why haven't women gone for these careers?

Kongar and UB Engineering School Dean Tarek Sobh said the profession hasn't been marketed to women properly.

But that's changing, Sobh said, and corporations are taking the lead in trying to encourage more women to come into the field. IBM, he added, has been particularly active in this area.

One problem is many people think engi-

neers sit at a desk by themselves, drawing up plans, but Sobh said the job includes a lot of customer service and face-to-face interaction.

Paul Kontogiorgis, director of IBM's Information Technology Curriculum Program, said his company is establishing programs at universities throughout the country to develop the full range of skills

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engineering student

IT professionals need for the business world. IBM, he said, is particularly focused on bridging the gender gap in the technical fields. To not encourage women to enter the field would be limiting the talent pool, he said.

The hope is by better explaining what engineering is about, more women will come into the field, Sobh said.

That's not to say men and women approach the field in the same way.

According to Kongar, when asked what they like about engineering, a key difference between the sexes is often the emphasis women place on improving the lives of others.

Indeed, three women in UB's engineering and computer science programs agreed this was a primary reason for going into the field.

"I'd rather work for a cause," said Prerita Manandhar, a second-year student in UB's technical management program.

Pragya Rajauria said her goal is to return to her native Nepal and create a tech company, because too many people with

abilities like hers and her husband's have to leave to find jobs. Rajauria's husband is a mechanical engineer.

Rajauria is going for her master's degree in computer science engineering.

Subrina Thompson, who is completing her bachelor's degree in computer science, said helping others is important but, she added, she loves the challenge of the work.

As with many engineers, the UB women also cited a strong sense of satisfaction received from solving technical problems as another reason for their career choice.

"I love programming. It's my life," Thompson said. "The ability to be given a problem and solve it in any language — it's amazing."

By this, Thompson meant using computer coding to create platforms with which people can enter data in different languages and still get answers.

Thompson, Rajauria and Manandhar all cited family support for their careers as key reasons for pursuing their dreams.

Thompson said her uncle in Jamaica encouraged her to become an engineer and would show her how to fix light switches and other things around the house.

"I have to do well," she said. "I can't disappoint my uncle."

When asked how they approach problems differently than men, the three women said almost exactly the same thing — their male counterparts tend to wait until the last minute to come up with a solution.

They also said the men tend to work sequentially on a problem, bit by bit, instead of looking at the big picture.

Ultimately, the women of UB's engineering program are in their fields for the best of reasons: they've found work they enjoy and are also good at.

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