

Catholic High engineers a new course for students

Like many high school students starting their senior year, Rachel Berry has a high interest in a particular college major.

Her curiosity in engineering, however, was just that until she returned to school at The Catholic High School of Baltimore in the fall. Like 14 other students at the all-girls school, she enrolled in a new pre-engineering program called Science, Technology, Engineering and Mathematics, better known as STEM.

The program has gone a long way toward answering lingering questions for Rachel and other students.

"I always wanted to go into engineering," she said. "I thought it would be cool to experience it now before I get into college and go 'Oh no, I don't want to do this!' I'm glad we offer it here."

The first STEM program launched in the Archdiocese of Baltimore is the brainchild of school president Dr. Barbara Nazelrod. The course, under the title "Engineering: Our Digital Future" enables students to create, design and test cutting-edge digital devices.

"It makes us unique in that regard," Dr. Nazelrod said. "It also helps break stereotypes in an unprecedented way. It forms a connection and shows what is possible and that women can go into math and sciences"

A National Science Board study found that women make up 10.6 percent of the total United States engineer workforce.

Catholic High math teacher Mauro Pasquini, who teaches the STEM program, calls the students "our pioneers."

The program has quickly become something of a calling card for the school, which has more than 320 students. A majority of applicants for the 2009-10 school year

show an interest in STEM, according to a school spokesperson.

Students must complete Algebra II and an honors biology class before taking the course.

Mr. Pasquini attended a one-week training program at Southern Methodist University in Texas last year to understand the program and how it is implemented. He spent the months leading up to the school year designing the retro-fitted classroom.

The once-standard looking room now is carpeted, has a large, wide pull-down screen with a wireless board for writing from anywhere in the classroom and looks like it belongs at a top-level college. Each desk is laptop computer-ready as well.

The room was named after the late Joanne Liberatore Kramer, a 1959 alumna. Her family, looking to give back to the school she loved, donated \$50,000 to cover the cost of the classroom project.

When it comes to labs, Mr. Pasquini says “they’re all virtual labs. We don’t make anything here.”

Futures, though, are being molded.

“We pledge ourselves to empower young women,” Dr. Nazelrod said.