

HOLYOKE

Springfield students explore HCC's STEM offerings

They calculated the trajectory of projectiles, explored the computer science that enables 3-D printing, built bridges out of newspapers, plotted transit maps, solved logic puzzles, examined atomic structures and generated magnetic fields.

Alban Medina conjured crackling bolts of static electricity from a large silver ball.

"You want to try it?" Medina said to his classmates. "It's science. I'm gonna be a battery, guys."

Medina, an 18-year-old senior from Roger L. Putnam Vocational Technical Academy, actually has his sights set on becoming a video game developer. But earlier this month he joined about two dozen Springfield high school students at Holyoke Community College for Engineering Exploration Day.

The event was sponsored by the HCC Admissions Office, the HCC STEM Scholars Program, and the HCC STEM Starter Academy. The students, from Putnam and the Springfield High School of Science and Technology, were invited based on an expressed interest in continuing their educations after high school.

While the students had a chance to participate in many different activities, Medina said he learned a lot about electricity from the exercise with a Van de Graff generator, which uses a hand crank to charge up a large silver ball with electrons that can be discharged by tool or touch.

"It showed me that everyone has a little bit of electricity around us," he said.

HCC STEM scholars – students attending HCC on scholarship from the National Science Foundation – and STEM teachers led the high school students in a series of workshops and activities. They gave tours of HCC's STEM Resource Room and talked about HCC's STEM Scholarship Program and free summer and fall STEM Starter Academy classes.

"Engineering Day was re-



Alban Medina impresses his Putnam classes by figuring out one of the logic puzzles set up for HCC Engineering Exploration Day.



Dayana Luna, left, and her classmates from Putnam Vocational Technical High School work on a logic puzzle using checkerboards and toothpicks.

ally about informing the high school students about STEM fields and what HCC has to offer to help them reach their goals," said Oscar Rubio, an HCC STEM scholar majoring in computer science and math. Rubio conducted one of the opening presentations.

"They seemed like an enthusiastic group," he said. "I hope some decide to come to HCC and join STEM."

That's the plan for Dayana Luna, a 17-year-old Putnam senior. She'll be taking a free, four-credit STEM Explorations class this summer

through HCC's STEM Starter Academy. She's graduating from Putnam this spring and already enrolled at HCC for the fall, but undecided about her STEM major.

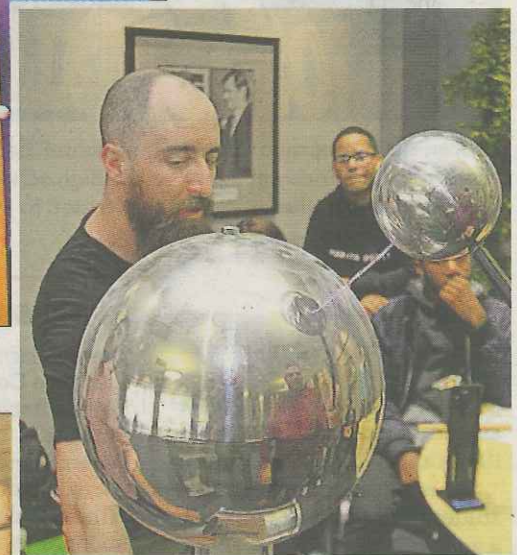
"I'm exploring for now," she said.

Luna, Medina and their

classmates from Putnam were accompanied on their visit by Mark Jordan, department chair of Putnam's Robotics program.

"This is great," he said. "I came from a community college environment. To see the level of support and everything they've got for students here who are interested in STEM fields, it's fantastic."

Melissa Paciulli, HCC's STEM project administrator, said the day was a tremendous success.



HCC engineering major and STEM Scholar Bill Pennington, of Westfield, leads an exercise in static electricity using a Van de Graff generator.

"Engineering Exploration Day was not only about letting incoming students know about our STEM programs and classes," she said, "it also offered our STEM students the opportunity to share their personal experiences of how HCC has impacted their personal journeys. Our students consistently impress me with their willingness and excitement to reach out to incoming and potential students. Our students are our best advertising."

The next session of HCC's free STEM Starter Academy classes begins July 9. For more information, go to: hcc.edu/stemstarter