

Explore Tech: Engineers Make a World of Difference

By Sarah Roy

From November 5 until January 5, 2017 the South Trail Library will host the Explore Tech: Engineers Make a World of Difference exhibit. This exciting exhibit is a way for children in and around Orlando to learn about the different ways that engineers make an impact in our communities through the use of STEM — or science, technology, engineering and math — focused learning. The need for STEM education is on the rise, as shown by the fact that of all degrees awarded in Central Florida, only 20% are in STEM related fields, compared to 30% nationally. In the future, our children need to be introduced and engaged in science and math, as the importance of these subjects continues long after graduation.

The exhibit includes hands-on learning tools that children can try including advanced robotics, such as Cubelets, and engineering-focused Snap Circuits. These learning tools introduce children to the concepts of technology, robotics, computer coding, math exploration and more.

Explore Tech offers students the chance to interact and experience NASA resources and programs. The program materials that are included in Explore Tech, such as LEGO® Robotics and Keva Planks, take the idea and objective for STEM learning out of the textbooks and place it directly into the hands of the students who need it. This aspect of the exhibit provides students with the opportunity to put their learning to the test in fun and new ways.

Along with the exhibit materials, this opportunity also gives NASA and the Library the opportunity to show the STEM field in action, with a presentation from guest speaker Ledlyne Heriscar Vazquez. Heriscar Vazquez is a first-generation college graduate born to Haitian immigrants. She graduated from high school in Florida, received an Electrical Engineering degree from UCF and went on to graduate with a Master's Degree in Industrial Engineering from the University of Miami. She is currently a systems engineer on various NASA projects at the Kennedy Space Center in Cape Canaveral. By introducing Heriscar Vazquez to area kids we are showing not just our minority and female students, but all of our children, that they can dream big and that their dreams are within reach. The best place for them to get that started will be at the South Trail Library at the Explore Tech exhibit.

NASA Explore Tech Opening Celebration

South Trail Branch

Saturday, November 5, Noon–4 p.m.

NASA and the South Trail Branch Library team up to present the Explore Tech: Engineers Make a World of Difference traveling exhibit. Keynote speaker Ledlyne Heriscar Vazquez, a Haitian Creole engineer from NASA, will start the celebration. Representatives from NASA and the Melrose Center will be on-hand for the festivities.

Coding Unplugged with Robot Turtles™

South Trail Branch

Tuesday, November 8, 4:30 p.m.

Learn the basics of coding and computer programming with the Robot Turtles™ board game and other fun activities provided by Code.org. No prior coding knowledge needed. Registration required. Ages 6–12.

Prehistoric Pottery

South Trail Branch

Wednesday, November 9, 4:30 p.m.

Learn about the advent of pottery in Florida with hands-on experimentation using Play-Doh® to explore pottery-making and decorating technology. Ages 6–12. Presented by the Florida Public Archaeology Network. Seating is limited. Registration recommended.

Explore Tech: Engineers Without Borders

South Trail Branch

Saturday, November 12, 2 p.m.

The University of Central Florida chapter of Engineers Without Borders will discuss how they are engineering change all over the world through projects like water sanitation, air quality improvements and open source software.

Ozobots®

South Trail Branch

Thursday, November 17, 4:30 p.m.

Learn the basics of coding and computer programming using a miniature Ozobot® robot. No prior coding knowledge needed. Registration required. Ages 6–12.

Explore Tech: Wind Turbine Tech Challenge

South Trail Branch

Monday, November 21, 4:30 p.m.

Learn how wind turbines work and how wind energy could be used to provide electricity by building a model and testing the results! Registration required. All ages.

Explore Tech: Design a Park

South Trail Branch

Tuesday, November 22, 4:30 p.m.

Imagine the park of your dreams and build it from the ground up with different activities. Registration required. All ages.

Fairy Tale STEM: Jack Needs A Parachute

South Trail Branch

Wednesday, November 23, 4:30 p.m.

This multi-part series will feature classic fairy tales with a twist. Help your favorite characters solve their problem through science, technology, engineering and math activities. Ages 6–12. Registration required.

Fairy Tale STEM: The Goats Need A Raft

South Trail Branch

Wednesday, November 30, 4:30 p.m.

This multi-part series will feature classic fairy tales with a twist. Help your favorite characters solve their problem through science, technology, engineering and math activities. Ages 6–12. Registration required.