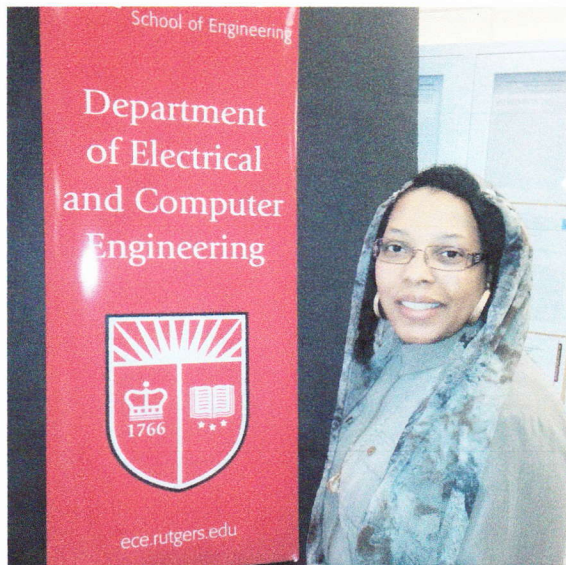


Rutgers Student Graduates After 18-Year Hiatus

Doreen Sparrow, who left Rutgers three times to have children, earns an engineering degree

By Sherrie Negrea | May 11, 2017



Doreen Sparrow hopes to work with electronics where she can design and build, and she looks forward to going to work every day loving what she does.

Photo: John Scafidi

Twenty-nine years ago, Doreen Sparrow began her journey to become an engineer and enrolled as a freshman at Rutgers.

Her experience in college, however, turned out to be anything but typical. She left school three times – to get married and have two children. When she decided to return as a full-time student after an 18-year hiatus, the dean of the engineering school told her she would have to earn an A in "Calculus 2" before she could be readmitted.

Sparrow retook the course at Union County College, went for tutoring every day and received an A. "If it wasn't for those tutors, I wouldn't have made it," says Sparrow, the first of her seven brothers and sisters to attend college. "But I was very determined to come back and finish what I started."

When she finally receives her degree from the School of Engineering this month, Sparrow will not only reach a goal that took her nearly three decades to achieve, but she will also see her youngest son, Khalif Hall, earn his bachelor's degree from Rutgers' School of Arts and Sciences in criminal justice. Her oldest son, Jaleel Hall, a 2011 graduate, is now on a break from Rutgers New Jersey Medical School.

"It's been a long road," says Sparrow, who has six children, ranging in age from 14 to 26. "There have been so many ups and downs. Doing full-time school and raising children and trying to be a wife was,

well – it's been a challenge."

Sparrow became interested in engineering while she was a student at her middle school in Plainfield, which offered an after-school program in engineering for minority students. Her thrill in building rockets and solving engineering problems eventually led her to apply to Rutgers School of Engineering.

In the summer of 1988, she arrived on the Busch Campus for a transition program offered by the Educational Opportunity Fund (EOF), which helps low-income students from New Jersey planning to attend college. Sparrow, who also credits her late mother with inspiring her to attend college, received numerous scholarships, including funding from the NAACP, a girls' program at her school and a realtor in Plainfield.

Because of her interest in electronics, Sparrow enrolled in Rutgers' electrical and computer engineering program, taking courses in analytical physics and general chemistry for engineers. Two years later, however, she left school when she became pregnant.

She returned a year later but then took another semester off after she had her second son. In 1994, when she married Montague Sparrow Jr., a custodian with the Plainfield Board of Education, and had her third child, she decided to stay home full time.

"That to me was the most amazing time," she says. "To see my children grow and learn and to be able to nurture them at home was wonderful. All of my children learned how to read at 4, and they were writing, doing mathematics and learning about the universe."

But something was urging her to finish her own education, and though she had worked as a science teacher and a mentor for young girls, she reenrolled at Rutgers in 2013. One of the highlights of her final sprint toward graduation was her senior capstone team project, which won a \$700 first-place prize in the engineering school last spring. Her team built a robot that could eradicate weeds in lawns by using detection software to identify specific plants.

Although she excelled in whatever she did, success did not come easily. "She had to make up for lost time and she was extremely determined to do so," says Michael Caggiano, a professor emeritus of electrical and computer engineering, who taught Sparrow in four courses. "She was very highly motivated and a very hard worker, and she had to be in order to make up everything."

Now that she is graduating, Sparrow hopes to work in the renewable energy field and has entertained the idea of designing solar panels that would be affordable to low-income residents. "I would like to do something in electronics where I can design and build," she says. "I want to go to work every day and love what I do."