This spring, Jaden Chambers was one of UCF’s 19 students selected for NASA’s competitive Pathways Program. Drawing from thousands of applicants a semester, the program provides up to 35 students opportunities to gain work experience and explore careers while they’re still in school — and may even lead to employment at the space agency.

“I chose to attend UCF because of its connections with various engineering companies, as well as its networking opportunities,” says Chambers. “UCF also provides its students with a very good engineering foundation and has paved the way to success for many individuals. ... I’ve always believed that NASA was out of reach for me ... I had no idea that I would have the privilege of working at such an inspiring and incredible agency.”

Working at Kennedy Space Center — where 29% of employees are UCF alumni — the sophomore is gaining hands-on experience that helps him develop the skills and connections he’ll need to achieve his goal of developing robotic equipment for future space missions.

Creating a Market for Out-of-this-World Soil

UCF is setting the standard for extraterrestrial soil. At an average cost of $20 a kilogram, UCF researchers are selling experimental Martian and lunar dirt to organizations like NASA’s Kennedy Space Center. To support efforts to put human settlements on Mars and other planets, the simulant soil helps space researchers explore the viability of growing food on the planet, developing concrete for lunar construction and running other essential tests before astronauts arrive.

“You wouldn’t want to discover that your method didn’t work when we are actually there,” says Pegasus Professor of Physics Dan Britt, who is working on the project. “What would you do then? It takes years to get there.”

UCF offers multiple soil simulants with formulas based on data from meteorites and the Curiosity rover, which landed on the red planet in 2012 and contains other UCF-developed technology.