Carlos Salas was in high school when he was first introduced to optics and photonics. Gary Beasley, a professor in the Laser and Photonics Technology program at Central Carolina Community College (CCCC), gave a presentation at Carlos’s high school, and his detailed explanations and compelling examples of photonics applications piqued Carlos’s interest. “I didn’t know anything about light, lasers, or optics,” Carlos recalls. “That was a brand new world to me.” By the end of the presentation, Carlos had decided to enroll at CCCC and work toward an associate of applied science degree in laser and photonics technology.

Carlos started the program with an open mind. Carlos had learned from Gary that the first year of the program would focus on electronics, and the second year on lasers and optics and how the technologies work together. What he didn’t know was how exciting he would find the program. He recalls, “When I got into the program, it was a lot better than what I expected. It was so much more interesting.” At CCCC, Carlos adjusted to being a college student. “The way they teach [in college] is completely different” from what he’d known as a high school student. But the most challenging part of his tenure at CCCC was working two jobs while going to school. One of those jobs was an internship at Wasatch Photonics, where Carlos applied the skills he was learning in school through hands-on exposure to spectroscopy. Carlos didn’t let anything deter him, and by May 2015 he had earned his degree.

Carlos is now working as a Process Technician at Phononic, a start-up thermoelectric company. Working for a startup company means that he wears many different hats. He works in the production area assembling heat pumps for refrigerators and computer cooling devices, and he also supports the development team. Thanks to his laser and photonics technology degree, Carlos is one of the few employees with the necessary technical skills for certain tasks. His job is a challenge, but Carlos appreciates being given tasks that he might not be able to accomplish. As he says, “It keeps things fun and interesting” and allows him to rise to the occasion.

“I ask question after question after question to find solutions. I learn something new every day; I experience new things.”

In the immediate future, Carlos would like to move up at Phononic and become a Development Technician. Later on, he wants to go back to school for an engineering degree. He hopes he could then continue working for Phononic as an engineer.

Carlos encourages interested students to research the different areas of photonics. “It’s not just light,” he points out. “You can go into electronics, go into thermoelectrics, or go into spectroscopy.” He thinks that hands-on learners should “definitely consider” a degree in photonics. Through the Laser and Photonics Technology program at Central Carolina Community College, Carlos learned to troubleshoot and solve problems by researching and finding answers on his own.

Carlos graduated from Central Carolina Community College in May 2015 with an associate of applied science degree in laser and photonics technology, along with a certificate in electronics engineering technology. When he’s not working, Carlos enjoys working on small projects and fishing. Carlos currently lives in Lillington, North Carolina.