Cassandra Durand was working as a tutor at Irvine Valley College (IVC) when a flyer in the tutoring center caught her eye. The flyer described a new certificate offered at IVC, a certificate of proficiency in photonics. Cassandra had always loved science, and an inspiring and encouraging teacher in elementary school had nurtured her love of mathematics. Cassandra was immediately drawn to the program and hoped that it would lead her to a fun and exciting career.

When she began taking classes in 2012, Cassandra initially thought the coursework would emphasize physics and math. She was surprised to find that IVC’s program was much more hands-on—and much more fun—than she had expected. She liked all her photonics classes and particularly enjoyed studying light and optics. Her greatest challenge, she found, was balancing work and school. She was still working as a tutor, and the center preferred for her to be available in the evenings. Unfortunately, many of her classes were only offered in the evenings, and she found it difficult to align her work schedule with her class schedule. She was occasionally late to class as a result, but she found that her professors were very understanding. Cassandra graduated in 2015 with an associate of science degree in electronics technology and certificates of proficiency in photonics and precision optics.

When Cassandra first applied for a job, she was more focused on her education than on job hunting. She says the application was more of an afterthought, but she knew that if she got the job, it would be good experience. Her single job application turned into a position working for Akima Infrastructure Services at the National Ignition Facility (NIF). Her official title is Engineering Technician IV/Target Diagnostic Operator. Her responsibilities include making sure the facility’s cameras and diagnostic devices are centered, working, and ready to collect data during operation. Working at the NIF gives Cassandra the opportunity to participate in physics and defense experiments that involve one of the highest-powered lasers in the world.

As a woman in a technical field, Cassandra has advice for girls and women who are considering a technical degree: “Don’t listen to anybody who says you can’t do it. Keep following that passion for math and science—you’ll get far.” She says there may be hardships and obstacles on the path to success, but she encourages girls to keep going and follow their passion.

Cassandra is happy with her position at Akima and especially enjoys being involved in “interesting projects that either have today or will have an impact on the world.” A happy perk of her job is the salary: she expects to make over $50,000 in her first year on the job, and that will only increase as her skills and abilities improve. She would like to eventually return to school to earn a bachelor’s degree, and her company may be willing to pay her expenses. Ultimately, Cassandra would like to be involved in engineering and design. She wants to improve her understanding of the physics and engineering of different devices Akima uses, as well as the process of creating those devices.

*Cassandra Durand graduated from Irvine Valley College with an associate of science degree in electronics technology and certificates of proficiency in photonics and precision optics in 2015. In her spare time she enjoys hiking, reading, writing, and playing video games. She lives in California.*