On working in the photonics field: “The thing I love the most is that I’m always doing a different project, and when it is finished, I feel like another milestone has been reached.”

Photonics was not Tanner C. Hutchings’s first choice when he was deciding on his educational and career goals, but it is a choice that he is grateful to have made. Tanner’s father, a mechanic, was a big influence on him. Tanner became interested in mechanics because of his father, and he excelled in his efforts. When Tanner began to consider his career options, his father counseled him to “go beyond working on cars for a living.” This advice led Tanner to consider engineering and technology.

Tanner is not one to settle for the ordinary; he wanted a career that would be interesting, yet would still provide him with distinctive qualifications in the workforce. According to Tanner, “I like to work with tangible things.” Consequently, he chose to study the fabrication and testing of precision optics. He explains that this field was attractive because it was “a high tech job that would certainly challenge me, and I wanted to do something different.”

Tanner chose to attend Indiana University of Pennsylvania to pursue a two-year associate in applied science degree in electro-optics. He describes his initial expectations for the program: “Honestly, I was a little terrified, knowing that the subject involved extensive study in math and physics. I worried that it would be difficult for me, but in the end, I did quite well.”

During his years at school, Tanner scheduled classes for Mondays through Thursdays. On Fridays, he worked as an apprentice at Hampton Controls, Inc., to apply what he learned in school.

Tanner greatly enjoys his apprenticeship, which has continued for four years. He works as an astro-optician in Hampton Controls’s optics division, where he helps manufacture space-based mirrors, lenses, and other optical equipment. He greatly enjoys his work, in part because he continues to work—and learn—with a “master optician with over forty years of experience.” He likes knowing that even his master teacher learns new things every day. As Tanner says, “The technology field is changing; therefore, you can be certain you will learn and experience new things. It’s such an impressive field.” He continues, “As far as my career goes, I’m trying to learn as much as possible through my continued apprenticeship. It really is a unique practice that doesn’t have a manual to follow. My boss always tells me, ’Precision optics technicians are worth their weight in gold,’ so I continue to give it my all.”

He admits that the precision-optics field can be challenging, “Since you are working in a high-tech field, room for error is minimal. If a mistake is made, it may cost dearly.” Even with these challenges, Tanner enjoys the variety that his job offers. He explains, “With any project, there is a process involved. Unlike other optical manufacturers, where employees may perform only one step in the process, I am able to take the raw materials through all the steps in production to a finished product. That includes planning the manufacturing steps and performing tests on the finished product.” He says with enthusiasm, “What I like most is that nothing is repetitive, and every project has its own problems. This is where I get to be creative and use some innovation.”
Tanner C. Hutchings earned an associate in applied science degree in electro-optics from Indiana University of Pennsylvania. He lives in Irwin, Pennsylvania, and owns two Australian cattle dogs, Jethro and Kallian. Tanner enjoys tinkering with classic cars, rock climbing, running, and snowboarding.