

COS Electrician Training Leads to Automated Manufacturing Career

After working 15 years as a well-paid machine operator, Juan Molina registered for the College of the Sequoias Electrician program on the recommendation of a co-worker. “I enjoyed my work as a machine operator but I knew there was a lot more to it,” said Molina. “I attended COS part-time for four years while working full-time and earned two electrical certificates. Now I’m a foreman at Cliff Smith Electrical, servicing electrical automation manufacturing equipment for food processors and earning more than I ever have with an interesting job that is different every day.”

Molina grew up in Tulare County and graduated from Redwood High School in Visalia. “I wasn’t even aware of electrical careers when I was in high school,” said Molina. “I went to work straight out of high school with a packaging company.”

Advancing as far as he could as an experienced machine operator at a large packaging company, Molina talked with the people who repaired the automated machinery assembling boxes. “The electricians and programmers told me what they were doing and the work was so relatable,” said Molina. “They said the growth potential was unlimited. Another employee was taking electrical classes at COS and encouraged me to sign up. So, I went back to school in my thirties despite working full-time and being a full-time single father.”

According to COS Electrician Training Instructor, Shane Baesemann, COS offers an electrical apprenticeship program that prepares students to become journeymen. Students can earn an Associate of Science in Electrical Technology as well as COS Certificates of Achievement in National Center for Construction Education and Research (NCCER) Electrical Applications and/or Electrical Theory. “Electricians are the highest paid trade in construction,” said Baesemann. “The starting the pay is about \$20-\$25 per hour but jumps to \$50-\$75 per hour after about five years. Graduates can work for residential, commercial and industrial contractors as well as solar installers, utilities and manufacturers.”

Molina completed both of the COS Certificates of Achievement in NCCER Electrical Applications and Electrical Theory as well as took two semesters of programming classes and one semester of automation classes. “The electrical classes are at least 50 percent hands-on learning,” said Molina. “We also got to work on projects in the community such as setting up refrigeration for a brewery and lights for a church to get real world experience. The instructors are very knowledgeable and supportive.”

Baesemann described Molina as a student who came in with just a little background and was always pushing himself to learn. “He worked to understand the whole system until he was fluent in motors, Programmable Logic Controllers (PLC) and programming,” said Baesemann. “We believe that being lab-heavy in the COS electrical program and giving students



on-the-job experience through community projects prepares them to distinguish themselves and advance their careers. Juan put in the time to develop his skills. That knowledge and work ethic makes him valuable to employers.”

As part of the program, Lisette Conway, COS CTE Student Success Center Coordinator, connected Molina to resources. “Lisette came into the classroom to make us aware of opportunities,” said Molina. “I’m grateful that Lisette told me about the two scholarships I received. She also helped me with my resume and set up two on-line meetings with employers.”

Partway through the program, Molina switched jobs to an electrical engineering, maintenance and construction firm. “Once I entered the trade, I was using what we were learning in class to install, repair and demonstrate equipment used in processing plants,” said Molina. “It was a great opportunity but challenging to be away from home. I traveled to new construction sites where I was part of building the plant from the ground up. The instructors were very forgiving in allowing me to make up the time and I was able to share what I was working on, from schematics to automated machinery, with the class.”

Since graduating with the two electrical certificates, Molina has joined Cliff Smith Electrical where he works as a foreman in electrical automation. “This is the best job I’ve ever had,” said Molina. “I have my own customers that are food processing companies as well as help with service calls and new customers. My goal is to minimize down for my clients and with new installations, maximize up time. I’m making great money and there is no repetition so that keeps it interesting. And, as a single dad, it is much easier not to be traveling as much for work.”

Molina sees a lot of career prospects working in automated food processing facilities where machines wash, sort, move, dry, can, package and palletize food for consumers. “Tulare County is agricultural-based community and everything is evolving with automation,” said Molina. “For example, stone fruit and pistachio farmers are looking for ways to make processing more efficient. I see unlimited growth potential and my goal is to soon be working 100 percent of my time on programming the automation equipment.”



COS can provide students with a great start to get into this field, according to Molina. “I absolutely recommend the COS electrical program,” said Molina. “Much of the class is working with your hands on the equipment and the instructors simplify concepts to make it easy to understand. Some people are intimidated about getting into the electrical field because they are afraid of making a mistake. I tell students to just stay with it and everything will come.”

The COS faculty and staff are extraordinarily supportive, explained Molina. “The school is really networked,” said Molina. “The electrical, automation and programming classes were connected with each other. COS is connected with local businesses, so the Career Center staff lets students know about job openings and brings major employers on campus where it is easy to meet them.”

The COS support programs regularly reach out to classes, says Molina. “There is unlimited help for students,” said Molina. “There are ‘many spoons in the soup’ working together at COS to assure students’ success.”

Baesemann indicated that COS offers everything a student needs to achieve their goals and Molina was a model student. “Juan appreciated how much effort the team at COS puts into guiding students and preparing them for their careers,” said Baesemann. “He was committed to learning everything he could and took full advantage of the opportunities and the connections with employers. I’m so proud of what he has achieved.”