

# Robotics Technician

Workers Interviewed by Bureau of Labor Statistics  
Reporter: Camden West — Fredericktown, Ohio

## What do you do?

I work for automotive parts manufacturer. I'm the robotics technician, but I'm also the die cast engineer. I do everything from the complete setup of robots to daily maintenance for robots.

We have about 8 robots. The robots pick a shot (a piece of aluminum) out of a die cast machine and bring it to a trim press. Robots are not something you have to mess with a whole lot. But in my job prior to this, we had 70 working robots. They were welding robots, so the robots had torches to weld silencers to car exhaust systems. And every day, my job would be teaching a robot how to do the job.



## Tell me how you teach a robot.

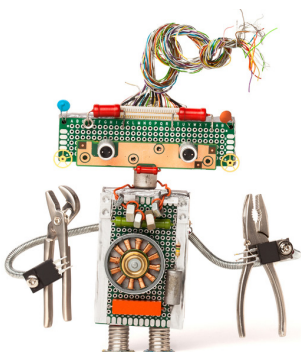
There are different moves you can program a robot to make. We enter information through a teach pendant, a device that controls the robot. Instead of teaching the robot through a computer program, the computer, or teach pendant, is on the robot itself. Depending on the robot you're working with, you might use different programming languages. It doesn't matter what the program or the make of the robot is; after you've learned one language, you can pick up others, because all robots are set up about the same.

## What happens if a problem arises?

I figure out what the problem is and fix it. Most robots will sound an alarm then identify what that alarm means. For example, it might tell you one of the circuit boards is bad. It will give you exact description of what's wrong and how to fix it. Sometimes that's as easy as going into robot maintenance mode and resetting the robot's memory. I also have a toolbox and work on the floor repairing things. I need to keep the robots and other equipment running at peak performance.

## What prepared you for this job?

I completed a 2-year degree in electrical maintenance. And I did take one semester of robot training that taught me basic handling moves, such as how to get a robot to pick up a shaft and insert it into a part. In my last job, I took a class to learn how to work with robots. But almost everything that I learned for programming was thanks to hands-on teaching from a co-worker. I'd follow one of the other workers around, who would walk me through what needed to be done. It was probably about a week's worth of training. After that, if I needed anything, I'd give that co-worker a call, and we'd work it out together.



## Are there skills that are important for robotics technicians?

Communication, how to listen and explain things, is important. Also, pretty much everything you deal with has some sort of scale or dimension, so you need to know



how to read blueprints, and recognize where and how robots are being used at the job site. And you should have basic computer skills: creating spreadsheets, presentations, and word processing. Some robots use software that you program offline on a computer, then walk to the production line to upload to the robot.

### How did you become interested in this occupation?

I actually wasn't going for robot technology. I was going to be an electrician or electrical contractor, and I got hired as an electrical engineering technician. It turned out I wasn't needed for that, so I worked as a mechanical engineering technician instead—and then I got thrown into working with robots. But even in college, I started playing around with robots and realized: “There's something here. This is fun.” I'm not one of those people who likes to sit a lot, so it's definitely an opportunity to get out of the office and learn.

### What do you like best about your job?

It keeps you busy and it's never the same. Every day, you always learn something new, even if you've seen the process 100 times. And you get to see and do a whole lot of things. For example, I once went to Japan for a couple days to see new robots we had coming. You get to learn and work with new technology!

### What's your biggest challenge?

In manufacturing, you're trying to keep equipment running efficiently and meet your production numbers. But when robots and machinery are not functioning as they should, that leads to downtime on production line. It's stressful knowing that workers are relying on you to solve a problem so they can do their jobs.

### What advice do you have for someone who wants to be a robotics technician?

There's always something new to learn, and it's amazing what these companies do with robotics. Take every opportunity you get to learn about robotics technology, because it's the way of the future. And it's a very entertaining career.



### QUICK CHECK:

1. Camden does everything from what to what?
2. a) How many robots at Camden's job? b) How many robots did his prior job have? a) Who does Camden teach?
3. a) What is a teach pendant? b) Why doesn't it matter what the program or make of the robot is?
4. a) What happens if a problem arises? b) What do robots do after sounding an alarm? c) Of what will the robot give a description? d) Why does he need a toolbox?
5. a) What education did Camden complete? b) Who does he thank for hands-on teaching? c) Who does he call if he needs anything?
6. a) List 2 important communication skills. b) What do you need to know how to read? c) List 3 important computer skills.
7. a) What did Camden get thrown into? b) What opportunity does this job offer?
8. List 3 things Camden likes about his job.
9. What is stressful for Camden on the job?
10. a) What does Camden think you need to take every opportunity to learn? b) Why?
11. a) Do you think you might enjoy working as a robotics technician? b) Why or why not?
12. Important skills for this job are how to listen and explain things. a) Who do you think has better listening and explaining skills — robots or humans? b) Give a reason for your answer.