

# Creating Pathways to Skilled Trade Careers in Advanced Manufacturing

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As technology continues to expand into every part of our lives, the advancements in manufacturing need both innovation and a skilled workforce to make it possible.

The manufacturing sector will need to fill 3.8 million skilled workers over the next decade, according to a [Deloitte study commissioned by The Manufacturing Institute](#). Current U.S. community colleges and apprenticeship programs are only expected to meet about half the number of workers needed to fill those jobs. That leaves a gap of about 1.9 million skilled manufacturing employees.

Toyota is working to address this shortage through manufacturing-oriented programs that teach students about the possibilities of fun, interesting careers they might not have considered. These programs also provide practical skills that will provide participants with well-paid jobs with growth opportunities.



### **Growing FAME Advanced Manufacturing Technicians**

In 2010, Toyota began a collaboration with the Bluegrass Community & Technical College, a school near the Toyota Motor Manufacturing plant in Georgetown, Ky. It has since expanded to a total of 10 Toyota manufacturing locations and a total of nearly 50 chapters nationwide.

This program became the Federation for Advanced Manufacturing Education (FAME). Students learn valuable skills from robotics to basic electricity, hydraulics, mechanics, and industrial troubleshooting. They also teach soft skills like teamwork, leadership, and time management.

“There’s an image that people have in their mind that manufacturing is dark, dirty, and dangerous, but it’s not,” said Stacy Droddy, talent acquisition analyst at Toyota West Virginia. “We try to share with our potential students that manufacturing is clean and safe. It’s highly technical. These aren’t just jobs. They are career pathways.”

Students receive paid training while attending school. Graduates earn associate degrees and can be certified as Advanced Manufacturing Technicians (AMTs). While they study, they work part-time in manufacturing facilities — being paid enough to cover tuition and living expenses.

When they graduate, their job is ready. About 85 percent of AMTs in the FAME program go on to work for their sponsoring employer. Graduates that are sponsored by Toyota have been working for the manufacturer for two years, and they already possess knowledge of Toyota’s systems and practices. When they come in, they are ready to hit the floor running,” Droddy said. “They don’t have to be taught about the equipment they’ll be working on.”



### **Graduate With No Debt and Skills to Excel**

That's how it worked out for Conner Bush. Bush, 20, started out with AMT at the recommendation of his father Mike, a longtime Toyota employee and manager at the Buffalo plant. Bush had a habit of fixing the family's garbage disposal or lawn mower when he was growing up. His dad suggested Bush might as well get paid to do something similar at Toyota. The idea started to make more sense to Bush when he took pre-engineering classes at the college and wasn't enjoying them.

Bush's aptitude was refined in AMT training, which also included learning about Toyota culture. His days are filled with unique and interesting challenges. He uses cutting-edge software and diagnostic tools to understand why equipment, such as high-speed spindles (tools that bore holes into engine blocks) aren't functioning properly.

"I have no debt whatsoever, and I've got a job that a lot of people my age would fight for," Bush said. "I just wish more people would do it, because it's a really good opportunity, especially for someone coming straight out of high school like I did."

*Series Note:*

*This article is part of a series of feature articles about the various workforce development programs across Toyota Motor North America. These programs span STEM education programs from Pre-K to 12, high-school and post-secondary industry programs, scholarships, internships and on-the-job training. To learn more about AMT, 4T Academy, T-TEN, Driving Possibilities, scholarship and internship programs, visit [Community Engagement in the Toyota Newsroom](#).*