

## Career Series Articles

### Manufacturing higher tech in 21st century

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A generation ago, a job announcement for a position with a furniture manufacturer might have read, "Experienced carpenter wanted."

A recent job announcement from LK Industries, a Jacksonville furniture manufacturer and one of the country's largest producers of store packages (furniture, equipment, graphics — everything except walls and floors), reads: "CNC Machine Operation — Experience with quality tools, good computer skills and working knowledge of wood CNC equipment such as Routers, Panel Saws, Point-to-Point and Edge Banding machines."

Excluding hermits, most people know manufacturing has experienced vast changes in recent years, even if they don't know "CNC" stands for Computer Numerically Controlled. With some exceptions a career in manufacturing does not involve working in dirty, deafening environments. Modern manufacturing technology has stepped up the skills and knowledge that employees must bring with them not only to land jobs, but also to stay current in their jobs and to advance.

It's true that automation, with several other factors, has reduced the numbers of certain manufacturing jobs such as the stereotypical assembly line worker. While less manpower may be needed on the assembly line, it's also true that emerging technologies have created new positions that require training and education beyond high school.

That creates challenges for employers who need trained workers to perform the high-skill functions and fulfill responsibilities their jobs require. It creates challenges for the employees competing for fewer jobs that pay well, but demand more of them than a generation ago.

That's why many manufacturers across the country form partnerships with community colleges and other technical schools, to ensure a qualified pool of entry-level employees from which to draw. Community colleges' state-of-the-art training facilities, such as the Advanced Technology Center at Florida Community College at Jacksonville, are led by experts who can deliver the theory and monitor the hands-on training so vital to entry-level employees, and current employees as well.

Integrated Systems Specialist Lance Wallace is often the first point of contact for prospective students in the FCCJ Computer Integrated Specialist Associate in Science degree program.

"Good candidates are those who like to work with their hands, who like to troubleshoot," said Wallace, about those considering entering the field. "Strong interest and skills in math and science are often indicators of likely candidates for manufacturing careers. They can choose from many fields right here in Jacksonville."

Wallace said that many are surprised when they discover the number and variety of local manufacturers that produce food and beverage, automotive, construction, medical/dental supplies and equipment, aerospace, pharmaceuticals, chemicals, cosmetics and numerous other products for local and national industries and consumers.

"Manufacturing on the First Coast is alive and well" said Lad Daniels, president of First Coast Manufacturing Association, the region's manufacturing advocacy organization.

"There are incredible career opportunities available, with jobs across the spectrum. The best opportunities are for those with the technical proficiency, a willingness to learn and a high degree of interest in being on the leading, bleeding edges," Daniels said in reference to rapid and exciting advances in manufacturing technology. "To be successful [in manufacturing], you have to commit to lifelong learning."

Some already have caught on to that advice. Professor Evan Kuharich of FCCJ's Computer Integrated Manufacturing program cites two students in his classes who already have engineering degrees. According to Kuharich they are there for the hands-on experience to complement their knowledge. Two women in the course break traditional boundaries and succeed very well, said Kuharich.

Rod McNeal is another of Kuharich's CIM students. As an electrician in the Navy, he gained plenty of experience and a level of proficiency. He knows he has to adapt his Navy-specific knowledge and skills for shore-side electronics and manufacturing.

Students can pursue an associate of arts degree (about \$4,200 plus books and variable expenses) as McNeal is, or they may opt to begin in a workforce certificate program (about \$2,000), and progress into a degree program if they choose. Entry level wages in industrial machinery and manufacturing average about \$17 an hour in Florida. Evening classes are available to accommodate work schedules. For more information on Advanced Manufacturing programs at FCCJ, call 904.646.2300 or visit [www.fccj.edu](http://www.fccj.edu).

\*Tuition and fees are subject to change by action of the College's District Board of Trustees. Current tuition and fees will be posted at the time of registration.