



Lorain County Community College Collaborates With Panasonic to Train the Next Generation of Manufacturing Professionals



CHALLENGE

Finding skilled workers in the manufacturing industry is an ongoing challenge, making education, training and reskilling programs critical to ensuring the successful future of this great industry. Lorain County Community College (LCCC), a public community college in Elyria, Ohio with a student population of 13,000, is working with Panasonic and other manufacturers across the country to make sure the industry has a strong, sustainable pipeline of skilled workers for years to come.



SOLUTION

In 2013, LCCC created a new associate degree program of Applied Science in Mechatronics covering topics around printed circuit boards, and the design and development of manufacturing technology and processes. With the backing of eight companies who understood the importance of ushering in a new generation of the microelectronics workforce (with college degrees) to replace outgoing or retiring trained experts, the program successfully started. In 2018, after five successful years, LCCC became the first community college in Ohio to offer a bachelor's degree of Applied Science in Microelectronic Manufacturing, an expansion of the associate degree focused on high-volume printed circuit board manufacturing.





RESULT

After a robust search of current technology options, LCCC chose Panasonic's SPG screen printer and NPM-W2 placement platform to utilize in their lab. In 2019, the equipment was installed, and the college was able to offer hands-on training using modern equipment in advanced manufacturing. The program continues to produce outstanding results, with 80% of current students gaining real-world, hands on experience through co-ops with over 70 local employers, while 100% of graduates have been hired into the industry.

About Lorain County Community College

Founded in 1963, Lorain County Community College has been offering local students the training and education needed – from workforce training, short-term certificates, and degrees– to successfully enter the professional world, post-graduation. Through LCCC's University Partnership, students can earn a bachelor's or master's degree from 14 Ohio universities and colleges or take part in the college's own Bachelor of Applied Science in Microelectronic Manufacturing – the first program of its kind offered at a community college in Ohio.

The college's bachelor's program offers students an industry-tailored curriculum with hands-on training around printed circuit board design, assembly and prototyping. Building off the college's associate degree program in the same field, the bachelor's degree program also helps students develop their knowledge in electronics, soldering, PCB drafting, GD&T, six sigma quality, lean manufacturing, and chemical processes in PCB fabrication.

In an effort to educate students on how to run a full, evolving manufacturing line, LCCC educators and industry partners provide hands-on applications, from soldering, to use of surface mount technology, to guidance on operations and programming. Real-time work being done in the school's lab with Panasonic's equipment matched with internships and apprenticeships, the college's program equips students with the right skills to enter the booming electronics manufacturing industry in Ohio – and across the nation.

LCCC doesn't only train undergraduate students in preparation to enter the workforce for the first time, however. Through the school's training institute MERIT

(Manufacturing Electronics and Rework Institute for Training), its educators are able to work with companies to help retrain and reskill their current employee base, giving employees the unique opportunity to learn new skills, up-level their current skillset, and move into higher mix roles across the manufacturing line. MERIT offers non-credit training programs to award certificates of completion to those looking to continue or refresh their skills.

“It has been such a pleasure working with collaborators like Panasonic to support our amazing students who are looking to grow their skills, enter a competitive field, and help the manufacturing industry's workforce grow. When Panasonic's president, Faisal, first came to our space – I could feel the enthusiasm radiating through the room. Faisal and the Panasonic team have showed tremendous support through our entire program and the training we've received has been phenomenal. It's incredible to work with such a large, international corporation that pays such close attention to detail to our individual needs at the college.”

— Johnny Vanderford, assistant professor and director of MERIT at LCCC

“The commitment that LCCC has made to their students and the entire manufacturing industry in Ohio is truly phenomenal. At a time when the demand for skilled electronic manufacturing talent is at an all-time high, this is the perfect program to connect talented students with employers who need skilled labor trained on the latest industry technologies.”

— M. Faisal Pandit, president of Panasonic System Solutions Company of North America

“Through this collaboration with Panasonic and LCCC's microelectronic manufacturing programs, students gain the skills needed to compete in a global economy. With the support of Panasonic, students are trained on equipment and processes that prepare them for the future of advanced manufacturing. I am thrilled this partnership helps local industry find the talent they need, while aligning our graduates with good paying, in-demand jobs.”

— Marcia J. Ballinger, Ph.D., president of Lorain County Community College

na.panasonic.com/us/industries/manufacturing

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CASE STUDY

