IVY TECH CREATES MACHINIST PIPELINE USING TOOLING U—SME ONLINE CLASSES & NIMS CERTIFICATION

Article provided by the Society of Manufacturing Engineers

At a time when skilled trade positions are the hardest jobs to fill in the U.S., Ivy Tech Community College in South Bend, Indiana, part of the nation's largest community college system, is setting the standard for establishing a steady pipeline of qualified machinists ready to hit the shop floor.

Ivy Tech's Machine Tool Institute simulates a real-world machine shop, where students punch in and out, learning both the hard and soft skills needed to succeed in the manufacturing world. In just two years, the program has issued nearly 300 NIMS certifications, and regularly places students in jobs in the local area with grads starting between \$14 and \$20 an hour.

"At Ivy Tech, we work regularly with local manufacturers to fill open positions and we can't produce machinists fast enough to meet the demand," said Robert Harris, Ivy Tech instructor. "There are so many opportunities in manufacturing and, at Ivy Tech, we are out to change lives by giving our students a complete skill set – life skills and tech skills."

Currently, 32 students of all ages and backgrounds, many with no previous manufacturing experience, are en-rolled in the school's five 8-week sessions. Motivated students are practically guar-anteed a job when they graduate and, in fact, most start jobs while they finish their training.

The successful program, covering everything from Metal Cutting to Safety, relies on Tooling U-SME online classes, which are aligned to NIMS certification.

"Ivy Tech is a model for the entire country when it comes to building a pipeline of workers to address the growing skills gap," said Toni Neary, Government and Education, Tooling U-SME. "Since November 2011, more than 60 Ivy Tech students



have completed more than 1,200 Tooling U-SME's online classes. These students are competent, confident and immediately employable."

Harris' students have shown an average knowledge gain of 15% throughout their time completing the pro-gram. Some of the most popular classes are CNC Specs for the Mill, CNC Offsets, CNC Manual Operations, Carbide Grade Selection and Cutting Tool Materials.

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"Tooling U-SME is a powerful tool which helps accelerate training," said Harris, 49, who never used online training before two years ago. "At first, our students took online courses from both Tooling U-SME and another well-known online training company, but soon we found that the students were completing the ToolingU.com courses more quickly and actually asking for more, so now we use Tooling U-SME exclusively."

Harris said students of all ages find the Tooling U-SME courses more user friendly and, for instructors, they are a huge time savings. "We assign book work and ToolingU.com courses to be completed before the hands-on work so our students are familiar and pre-pared to work on the machines," he said.

This training helps address one of the biggest challenges in manufacturing: the severe shortage of skilled workers needed to fill today's jobs, brought on by a limited pipeline, retiring baby boomers, reshoring and the changing pace of technology.

Companies say that access to a talented workforce is critical for growing their businesses. In fact, Deloitte's 2013 Global Manufacturing Competitiveness Index indicates that talent-driven innovation based on the quality and availability of workers (skilled labor as well as researchers, scientists and engineers) is the number one driver of manufacturing competiveness.

"The knowledge from retiring toolmakers and machinists will be lost unless we focus a younger generation on developing these skills now," said Harris. "We get calls from companies every day looking for talented workers and there are plenty of career opportunities for people who want, and are trained, to do the job."