Bringing Advanced Manufacturing Jobs WITHIN REACH

Advanced Manufacturing Instructor Peter Dettmer with student Mathew Cook from the Machine Tooling Technics program.

Ken Starkman, dean of the Center for Manufacturing, Apprenticeship and Transportation (CMAT), emphasizes the community benefit of this training. "We train technicians in area businesses on their own time and often in their own location. The instructors and highly skilled technicians also learn from each other creating a very positive synergy. These companies know how to stay competitive."

The college is in an excellent position to train this future workforce, he adds. "Our students are taught by a core of outstanding faculty. This instruction combined with state-of-the-art equipment allows us to equip students with a highly desirable set of skills. The students apply skills in design, problem solving, computer technology, material science, production engineering, quality and customer support."

This new direction in manufacturing is helping our businesses and communities advance technology and grow much more competitive jobs.

Madison College students, along with workers in our communities, are learning the computer and robotic solutions of "advanced manufacturing." So, what is advanced manufacturing, and how will it impact future jobs in our community?

Advanced manufacturing starts with an idea, something you can't get from machines. People are needed to come up with innovative and efficient ways of doing things, and this is creating opportunities in design and engineering. Flexible robotics and automation equipment are taking over the repetitive, monotonous and dangerous jobs, but well-trained workers are needed to program, run, maintain and troubleshoot these devices.

Madison College is offering training on the operation and integration of these exciting new opportunities both on campus and in the community. Thanks to a federal Economic Development Administration grant, the college is providing advanced manufacturing training through the college's Business and Industry Services office. The training includes robotics, programmable logic controllers and computer-aided design and manufacturing as well as training in hybrid vehicle technology.

However it takes shape, this future is coming at break-neck speed. "In advanced manufacturing, it all has to work and it has to work fast…Global competition is here to stay. With the right combination of leadership, education, innovative ideas, technology and skilled talent our community will remain extremely competitive." In other words, the future of advanced manufacturing is already here.

Advanced Manufacturing

- 20 programs and certificates
- 85% of programs have a waitlist for spring
- 386 graduates*
- 81% employment rate**

*Graduates from 2009-2010 academic year.

**Source: Madison Area Technical College 2009 Graduate Employment Report.