

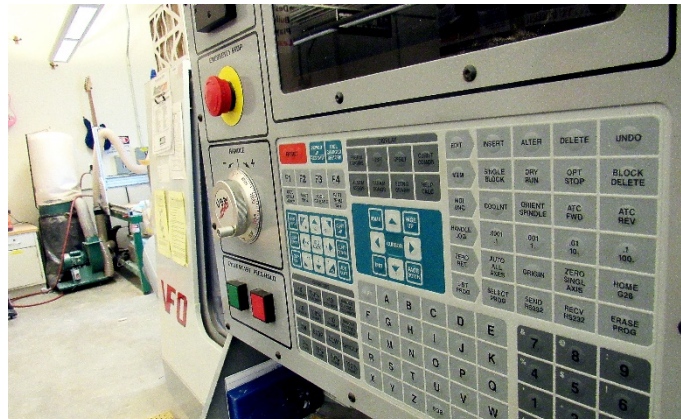
Online Basic Manufacturing Workplace Certificate a first for STEM at BC3

“This is the model they want,” dean says of incumbent workers

March 7, 2017

(Butler, PA) This fall, Butler County Community College will begin to offer its entire 17-credit Basic Manufacturing Workplace Certificate program online, enabling incumbent workers and job-seekers to gain marketable skills from home and according to their schedules.

“I am not aware of anyone regionally doing this type of workplace certificate with the breadth of foundational skills where geography is not a barrier and nor is scheduling,” said Matt Kovac, dean of BC3’s Science, Technology, Engineering and Mathematics Division.



A Haas Machining Center is shown Feb. 22 in a manufacturing lab at Butler County Community College’s main campus in Butler Township. Students enrolled this fall in the online Basic Manufacturing Workplace Certificate program will be able to replicate the Haas Machining Center’s applications using emulator software on their own computers.

BC3, ranked No. 13 in September among 117 Pennsylvania colleges and universities in distance education by OnlineColleges.com, also received approval in February to offer Internet courses to students in 46 other states.

BC3’s tuition, according to 2013-14 data published in the U.S. Department of Education’s College Scorecard and analyzed by The Pittsburgh Business Times, was lower than all 24 four-year schools in western Pennsylvania. OnlineColleges.com also reported BC3’s 2014 tuition was lower than 113 of the 117 Pennsylvania colleges and universities it surveyed.

Students who enroll this fall in the two-semester Basic Manufacturing Workplace Certificate may also be eligible for financial aid, Kovac said.

Online courses offered this fall and leading to the certificate would be technical math I, technical graphics with AutoCAD and computer numerical control (CNC) programming. Students who have appropriate National Institute of Metalworking Skills (NIMS) certifications would receive credit for the CNC programming course, Kovac said.

In the spring of 2018, students would take online courses in geometric dimensioning and tolerancing, manufacturing processes and materials and college writing or speech.

“Applications are going to be put on top”

“I have taken all these courses,” said Scott Covert, training coordinator at Penn United Technologies, with 550 employees one of the largest manufacturers in Butler County. “I know first-hand how they relate to manufacturing, and how important and relevant they are to manufacturing. These are the skills that you will use in manufacturing every single day. And at almost every manufacturing company in our area, you are going to use those skills every single day.”

Job-seekers having completed the Basic Manufacturing Workplace Certificate will “have a huge edge,” Covert said. “I guarantee that their applications are going to be put on top.”

More than 3,420 manufacturers in 11 western Pennsylvania and three eastern Ohio counties employ nearly 121,000 workers who earn on average \$52,000 per year, according to the North American Industry Classification System, the Pennsylvania Center for Workforce Information and Analysis, and the Ohio Development Services Agency.

With the online availability of courses leading to the Basic Manufacturing Workplace Certificate, incumbent workers pursuing advancement through expanded skill sets or those seeking employment are no longer bound by class times or brick-and-mortar sites, Kovac said.

“This is the model they want”

“They will work on their own schedule,” Kovac said. “These are workers who have a family, who are caregivers, who do not have the flexibility given their fixed work and personal commitments to accommodate a traditional schedule offering of courses. They don’t want to be blocked in, to be here at a certain time. This is the model they want.”

While working full time, Covert attended night classes at BC3 and earned a machine tool programming diploma in 2009, CNC programming technology and machine tool technology workplace certificates in 2011, and an associate degree in computer-aided machining technology in 2014.

He has been employed at Penn United Technologies for 27 years.

“For anyone who works a full-time job, and is raising a family, it is very hard to set aside a certain time every week, say Tuesdays and Thursdays, from say, 6 to 9,” Covert said. “It is very difficult to keep that schedule because life happens, and life doesn’t care what your after-work school schedule might be.”

Kovac had earlier promoted a face-to-face version of the Basic Manufacturing Workplace Certificate program to incumbent employees at a worksite in Butler County.

“I’d have a nice turnout, say, 25 or 30 or more, and I saw an enthusiasm and an interest, but what it boiled down to was, for them, ‘I am working 45, 50 hours a week. When do you offer the classes? I don’t see how I can do that with my work schedule.’”

Kovac said if he were offering a face-to-face class to those employees at set times on Monday, Wednesday and Friday mornings, “and he or she is working 45 to 50 hours, and they have swing shifts, forget it. It didn’t go any further.”

Now online, it might, Covert said.

“An online program lets you take the time, as much time as you have, whenever you have the time, to work on your courses,” Covert said, adding that the Basic Manufacturing Workplace Certificate also alleviates training time and costs for employers.

“A cost-savings for the company”

“If you can come into a manufacturer with those skills already in hand, that’s less training the company will need to put into you,” Covert said. “It’s actually a cost savings for the company to hire you. From a production standpoint, the time that they would spend training you on those subjects they can now spend having you working on the production floor instead. So it’s a cost-savings two ways.”

Finding time to train employees can be difficult for smaller manufacturers, said Karen Riethmiller, a professor in BC3’s STEM Division who has taught AutoCAD inventor, AutoCAD essentials, GD&T training, CNC programming, blueprint reading and industrial math I and II on the site of a number of western Pennsylvania manufacturers since 2011.

“If they could let us do the training, then the company can work on the other side of the skills for them,” Riethmiller said.

Certificate-holder to be “ready-made workforce-employee”

The Basic Manufacturing Workplace Certificate program, she said, “is going to provide a ready-made workforce-employee coming in with skills, and they can actually be a good employee for them.”

Riethmiller will be among instructors in the program teaching courses whose credits can be applied toward four BC3 associate in applied science degrees, Kovac said: the 64-credit Manufacturing with Advanced Technology degree; the 61-credit Engineering Technology with CADD degree; the 61-credit Computer-Aided Machining Technology degree and the 63-credit Applied Industrial Technology degree.

Her courses intend to introduce incumbent workers or job-seekers “to the basic skills that they need for communicating, given the technology, the language,” Riethmiller said. “When you are

in a certain field there are technical terms you need to know and what they mean. The courses will also give to students critical-thinking skills.”

Added Kovac: “I would like to think that any well-rounded organization would value those who have a broader knowledge base.”

The Basic Manufacturing Workplace Certificate is the first in BC3’s STEM Division to be offered entirely online, Kovac said.

The Basic Manufacturing Workplace Certificate is the fifth BC3 program that can now be pursued entirely online, according to Ann McCandless, BC3’s dean of educational technology. The others are a 60-credit associate of applied science degree in business management, a 30-credit Business Skills Certificate, a 33-credit Human Resource Management Specialist Certificate, and a 16-credit Microsoft Office Specialist Workplace Certificate.

For more information, contact Karen Fair at 724-287-8711, Ext. 8295.

BC3 program to prep workforce

Butler County Community College will offer its Basic Manufacturing Workplace Certificate online this fall. More than 3,420 manufacturing companies in 11 western Pennsylvania and three eastern Ohio counties employ nearly 121,000 workers who earn on average \$52,000 per year:

Eastern Ohio counties

County	Companies	Workers	Ave. pay
Columbiana	180	5,999	\$41,600
Mahoning	329	9243	\$48,256
Trumbull	242	12,670	\$63,544

Western Pennsylvania counties

County	Companies	Workers	Ave. pay
Allegheny	1,147	36,150	\$59,564
Armstrong	75	2,017	\$51,825
Beaver	175	6,663	\$59,564
Butler	271	12,325	\$62,194
Clarion	40	1,474	\$38,533
Crawford	289	7,820	\$47,159
Elk	134	6,631	\$49,650
Jefferson	115	3,699	\$46,567
Lawrence	149	3,532	\$54,138
Mercer	187	8,569	\$55,485
Venango	95	4,014	\$49,942

North American Industry Classification System 31-33, the Pennsylvania Center for Workforce Information and Analysis, and the Ohio Development Services Agency.