

NCWorks Certified Career Pathway

Advanced Manufacturing

Application

SOUTHWESTERN WORKFORCE DEVELOPMENT BOARD

REGION "A"

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Section 1 – Demand Driven and Data-Informed

Beginning in early 2015, the Southwestern Workforce Development Board (SWDB), covering Region A in Western North Carolina, worked with a diverse set of regional partners to determine the most appropriate industry to develop a Certified Career Pathway. After careful review of the labor market data for the seven counties in Region A (Haywood, Jackson, Swain, Mason, Graham, Cherokee and Clay), the SWDB determined that Advanced Manufacturing would be the targeted industry .

Over the course of several months and multiple meetings, it was determined from discussions with advanced manufacturing industry partners that there is a skills gap, as well as an erosion of “soft skills”, in the region that is effecting the workforce available to industry. For example, both executive and human resource personnel from [Giles Chemical](#) advised that they were in strong need of drug testing education among new hires. Additionally, due to [ConMet](#)’s manufacturing requirements, they were in need of employees proficient in Microsoft programs, which led to the inclusion of the Microsoft Digital Literacy Certificate in this Pathway. Other needed skills were identified, which will be touched upon in this application.

Manufacturing has always been vital to small mountain communities in Western North Carolina. As evidenced in the data, as these opportunities leave WNC, so do our best and brightest to pursue careers elsewhere . While we do not expect to see a large increase of advanced manufacturing jobs relocating to this region of WNC in the near future, the advanced manufacturing industry is still incredibly important to this region. Over the next five to ten years, advanced manufacturing employers across the region will see a large number of employees reach retirement age, which in turn leads to the need to replace this aging workforce. It is imperative to the continued economic strength, vitality and durability of this region, and all of its communities, that a qualified workforce be in place to fill these jobs, so that the employers in the region are not forced to relocate out of the region due to a workforce gap. A potential outcome if advanced manufacturing companies leave the region would be the decrease of the regional workforce, otherwise known as the “dying counties concept.” In an article about the decrease in WNC’s population, a pertinent quote is as follows:

“The ‘dying counties concept’ is best understood by one quote from the article “Over the past 5 years, the population fell in 48 of NC’s 100 counties while the state population grew 6.3%. The

shrinking counties are typically small to medium-sized counties around the state where the decline of manufacturing has hit hard...”

Realizing the need for an Advanced Manufacturing Career Pathway in Region A, the Southwestern WDB developed a Strategic Plan for developing and rolling out the Pathway . This Strategic Plan outlines the meetings held, employer surveys conducted, and outcomes developed, in furtherance of the Advanced Manufacturing Pathway. The ultimate outcome is the development of the Region A Advanced Manufacturing Work Ready Certificate.

Section 2 – Employer Engagement

The Southwestern Workforce Development Board (SWDB) is committed to and embraces an employer-driven philosophy with regards to workforce development, and the development of this Certified Career Pathway. In preparation of each step of the Advanced Manufacturing Certified Career Pathway, the SWDB has utilized a standing advisory committee of manufacturers to provide insight, feedback, and critical assessment in order to make every attempt to continuously improve the entire workforce system. The seven counties served by the SWDB, while representing a large land mass area, do not contain a surplus of medium to large manufacturing entities. However, prominent Region A companies such as Evergreen Packaging (formerly Blue Ridge Paper), Franklin Tubular, ConMet, Aegis Power, MGM Brakes, Giles Chemical, Elastic Products and others have been involved in this initiative since the beginning of 2015 .

Over the early months of 2015, multiple meetings were held with industry partners to determine their current and future workforce needs. During these meetings employers were informed that this Pathway would be developed through their leadership and engagement. Multiple participants from each of the industry partners listed above, from executive level to human resources personnel, participated in these meetings and provided detailed information on their training needs, and outcomes desired, for the training program eventually developed.

Through this multi-stage engagement with employers, it was determined that a short-term continuing education program would be instituted to meet industry needs – The Region A Advanced Manufacturing Work Ready Certificate program. This training will include five certifications/credentials that are stackable and portable, and will include:

- OSHA 10 Hour Industry Safety Certificate
- Microsoft Digital Literacy Certificate
- National Career Readiness Certificate
- Manufacturing Specialist Certification (through the Manufacturing Skills Institute – MSI)
- Working Smart Soft Skills Certificate

Employers have been very enthusiastic about this program, and have indicated that any participant who successfully completes this program would be identified as highly skilled, and would receive first consideration for any open position among the employers.

A survey of potential advanced manufacturing curriculum courses and topics was sent to employers. Four categories were provided – Soft Skills, Certifications, Introduction to Manufacturing, Employer Participation – and the employers were asked to indicate which topics were most pertinent to their hiring needs. These survey results directly influenced the development of the Advanced Manufacturing Work Ready Certificate program.

Section 3 – Collaborative

Region A is widespread over seven counties and three community college service areas. More than 40 people representing local government, public schools, chambers of commerce, manufacturers, community colleges, NC Commerce, NCWorks and the Southwestern Commission took part in this plan. A planning team of 18 people, representing all of the representative regional partners, was established. This planning team led the overall development of the Pathway, over the course of several months.

Section 4 – Career Awareness

It is the intent of the Southwestern WDB Pathway Initiative to identify, expand and expound upon current educational and business led efforts to raise awareness of Advanced Manufacturing career opportunities throughout Region A. The Certified Career Pathway will be committed to helping students, parents, teachers, and the general population realize that there are terrific career

opportunities throughout Region A. We hope this provides a forum for business and industry to “tell their tale” to their community educators and potential employees.

Section 5 – Articulation and Coordination

Credits that articulate between institutions are strength already available in Region A. We have three community colleges in our region. An example is Haywood Community College’s Computer Assisted Machining program. Of the two high schools in their service area, Tuscola High School sends students to the community college where students earn Career and College Promise credit which articulates back to the high school. At Pisgah High School, students take machining classes on the high school campus in a Golden Leaf grant funded shop and the credit articulates to Haywood Community College. Additionally, those workers who have successfully completed an associate’s degree can continue on to similar programs at Western Carolina University.

Section 6 – Work-Based Learning

At present there are no work-based learning experiences associated with the Advanced Manufacturing Career Pathway. Employers have been reluctant to accept liability other than some temp situations and school internships. We hope to leverage the success of the Region A Work Ready Certificate into work-based learning experiences provided by potential employers. Work-based learning will follow success of the Region A Work Ready Certificate program of study, and potentially become a cornerstone of workforce development for manufacturers.

The NCWorks Career Centers will play an important role in Work-Based Learning across Region A. As this Pathway moves forward, and job seekers complete the Advanced Manufacturing Work Ready Certificate program at one of our partner community colleges, there will be increasing opportunities for On the Job Training (OJT) opportunities. The Southwestern WDB is currently working with the regional Career Centers and advanced manufacturing employers on developing Standard Operation Procedures (SOPs) for future Pathway-related OJTs.

Section 8 – Evaluation

The capstone of our pathway, the Region A Advanced Manufacturing Work Ready Certificate, will provide a more stable and work ready pool of potential employees which should take the guesswork out of hiring and promotion, and help reduce costs and minimize risk. All participants will be registered in NCWorks, along with jobs already posted there. This will serve as one of our primary tracking mechanism.

We hope to run a cohort at each of the three community colleges over the next year. The first will be held at Haywood Community College in December 2016. At the conclusion, the Southwestern WDB will meet with employers and HCC instructors for evaluation of the program and determine what changes should be made. Any alterations, additions or subtractions be driven by employers. Additionally, a survey will be conducted among those who finished the program, to get their input of the program.

The bottom line in evaluation of any program should reflect the objective of said programs. In this case, how many people were employed as a result of participating, and how many manufacturer are pleased with the hires they made from the program. This analysis will be on-going and cumulative. Over the first 12 months of the Pathway, the Southwestern WDB will engage with the Pathway planning team, as well as other regional partners, to determine the best metrics for sustaining this Pathway for the benefit of Region A industry and employees.