

The Advanced Manufacturing Center at A-B Tech



ABTech
Community College

A-B Tech Advanced Manufacturing Center

The Advanced Manufacturing Center (AMC) is a new teaching and training facility on A-B Tech's main campus. This state-of-the-art manufacturing training center houses the college's Customized Training Program for business and



industry training, the Composites Training Center of Excellence, the Industrial Maintenance & Automation Academy, and the Machining Training Center.



With over \$3 million in high-tech training equipment, AMC is comprised of over 30,000 square feet of instructional labs, shop spaces, classrooms, conference and student collaborative areas, staff offices, and areas for training the employees of local manufacturing companies.

Customized Industry Training



Training in all major categories— safety, technical/job-specific, business support, continuous improvement, leadership/professional development, bio-manufacturing.

New equipment and expanded capabilities:

- Two new classrooms
- Electrical assembly and quality
- Hands-on forklift course
- Kone overhead crane
- Manufacturing Leadership Bootcamp
- Lean Six Sigma simulation space
- Automation and controls
- Machine operator training systems
- Giant flat screens for instruction

Industrial Maintenance & Automation

Focus on electrical principles, automation and controls, mechanical principles.

New equipment:

- Industrial motor controls trainers
- PLC trainers
- Motor controls and PLC troubleshooters
- Laptops for working with automated systems
- Manufacturing production systems simulators (conveyor, assembly, testing, sorting, distribution, processing, handling, robot)
- Fanuc robot



Median pay for
Industrial Maintenance Technicians
is **\$53,180.**

Median pay for the
top 10% is \$79,150.

-US Bureau of Labor Statistics



**Median pay for machinists
is \$22 per hour.**

-US Bureau of Labor Statistics

Machining

More space, more and better equipment for Machining 101, Machining Fundamentals, CNC Machining, Metal Fabrication.

New equipment:

- Haas CNC mills
- Haas CNC lathes
- Haas CNC 3-axis mill
- Controls simulators
- Drilling operations
- Manual mills
- Manual lathes
- Surface grinders
- Press brakes
- Hydraulic shear
- Giant flat screens for instruction

Composites

Dedicated training space and equipment for composites.

New equipment:

- Updated ASC autoclave controls
- Plycutter tabletop replacement
- Mobile autoclave
- Height-adjusting layup tables
- Giant flat screens for instruction

Electrical/Mechanical Assembly

Electrical assembly and soldering certifications that lead directly to local jobs.

New equipment:

- Complete solder workstations

Certified Production Technician

Nationally-recognized core skill certification for manufacturing covering safety, quality and measurement, production processes, maintenance awareness. In demand by local employers.

New equipment:

Hands-on Skill Boss training and assessment systems:

- Parts feeder
- Robotic pick and place system
- Electro-pneumatic system
- Chain and belt mechanical drive systems
- Operator station with Human Machine Interface (HMI), Variable Frequency Drive (VFD), Programmable Logic Controller (PLC)

Over the next decade
nearly **3.4 million**
manufacturing jobs
will likely be needed

-Deloitte



Nearly
120,000 new
Industrial Maintenance jobs
will be added **by 2028**

-US Bureau of Labor Statistics



The Need for AMC

Identifying the need to meet employment and skills requirements in the ever-growing manufacturing sector, A-B Tech developed an Advanced Manufacturing Center in 2014, and \$1.3 million was appropriated from the Connect NC Bond to fund renovations to A-B Tech's Maple Building. Over the last five years, North Carolina Community College System equipment allocations and grants from Duke Energy and Golden LEAF have helped A-B Tech acquire over \$3 million in state-of-the-art training equipment. AMC's presence ensures that local companies have the workers they need for years to come.

AMC also will help spur and support local economic growth. Regional workforce partners and business leaders have recognized it as a key component in recruiting new manufacturing businesses to Western North Carolina, especially those involved in high-tech manufacturing.

Every job in manufacturing creates
another 2.5 jobs
in local goods and services

For every \$1 invested in manufacturing,
another **\$1.37 in additional value**
is **created** in other sectors.

-Deloitte



For more information
visit abtech.edu/amc or call 828-398-7760 Se habla Español

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