Washburn Tech

CASE STUDY

Rigorous curriculum and Trane advanced technologies better prepare tomorrow's workforce

Challenge

With forecasts indicating continued growth in the climate control industry, Washburn Tech was challenged to provide the advanced training needed to prepare its students for the growing and changing demands of the industry. The heating, ventilation and air conditioning (HVAC) equipment in the training labs was outdated, with many of the pieces more than fifteen years old, often donated by area residents and supporting mechanical contractors. At the same time, the institute recognized the aging technical work force and the need for a state-of-the-art curriculum incorporating the latest technologies. WT sought to upgrade its HVAC program and labs to meet the needs of its students and the industry. School administrators knew that enhancing their program would require significant capital, a way to mitigate construction costs and a functional team, and like many educational institutions, budgets at WT were tight.

Solution

Washburn Tech contacted Trane, an HVAC industry leader, for assistance with its curriculum and technology upgrade. Trane worked with WT to seek funds through various grant programs, providing data for their justification and helping to complete applications. WT was awarded grants from the Kansas State Energy Sector Partnership Training, the Jobs & Innovative Industry Skills Training and the Ingersoll Rand Foundation.

Washburn Tech

Topeka, Kansas

ABOUT WASHBURN TECH

Washburn Tech (WT) is a nationally recognized innovator in career and technical education designed to enhance lives and strengthen the communities it serves. WT's Midwest Training Center (MTC) provides training in current and emerging climate and energy control technologies. Backed by a system of connected and stackable credentials, the center offers existing technicians, new students and displaced workers a multitude of programs in a variety of industry sectors including energy, transportation, and advanced manufacturing. MTC's goal is to provide the workforce with the training needed to enable regional business growth. The center also provides train-the-trainer opportunities to secondary and post-secondary instructors throughout the Midwest.

Mitigating construction costs using TCPN

Washburn Tech used The Cooperative Purchasing Network (TCPN) to mitigate construction costs and to provide a faster, easier resolution to its lab upgrade. TCPN allows large and small government entities such as schools, colleges, cities, and non-profits to leverage their purchasing power to ensure they are getting a good value on products and services. All TCPN contracts are competitively bid and evaluated by a government entity and awarded to national vendors based on quality, proven performance, customer satisfaction and pricing. TCPN provided WT with a means to directly negotiate procurement, which greatly reduced change orders and construction costs.

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CASE STUDY

Enhanced curriculum closes the skills gap

WT and Trane, along with the National Coalition of Certification Centers (NC3), formed a strong public-private partnership to bridge the gap between education and industry workforce needs. The team sought to enhance the institute's HVAC program by elevating training to the level required by industry.

NC3, a network of education providers and corporations that validate new and emerging technology skills to advance workforce development, has served hundreds of thousands of students nationwide. Working hand-in-hand with WT and Trane, the organization supplied the substance to the WT curriculum, based on their history of developing, standardizing, and implementing sustainable certifications across the nation. To enhance its HVAC program, WT added instruction in building automation controls and functioning commercial HVAC systems, which were not previously part of the college's offering.

Advanced technologies upgrade training labs

Once the HVAC program's new direction was established, work began to update the institute's training labs in order to complete the transformation. WT administrators knew that in order to enable its students to meet the industry's emerging challenges, it was important to offer them the opportunity to gain experience with the latest technology. Trane and WT worked together to select the lab equipment that would best fit their enhanced curriculum and prepare the workforce of tomorrow. Trane replaced the aging equipment with advanced, high-efficiency HVAC systems, including rooftop units, furnaces, and a variable-air-volume system with a simulated boiler and chiller loop, along with Trane Tracer Summit® building automation systems. The training pieces, provided by Trane pro bono, included both traditional wired equipment, as well as advanced wireless technologies, creating a technically advanced HVAC Center of Excellence.

The Midwest Training Center includes a state-of-the-art controls lab to support Washburn Tech's enhanced curriculum and focus on climate and energy control technologies.

Results

Washburn Tech, Trane and NC3 are working in partnership to better prepare the workforce of tomorrow. The functional collaboration of this team achieved their common goal of enhancing career and technical training by creating the Midwest Training Center, complete with advanced HVAC classrooms and working labs, to improve desired outcomes for the students. A rigorous curriculum, combined with updated training labs featuring the newest equipment and advanced technologies, are ensuring that graduates possess the skills, training and validation required by the industry.

TRANE

Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit *trane.com* or *tranetechnologies.com*.

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