

**2015  
AWARD  
WINNER**

**EXCELLENCE IN ACTION**

**Architecture &  
Construction**

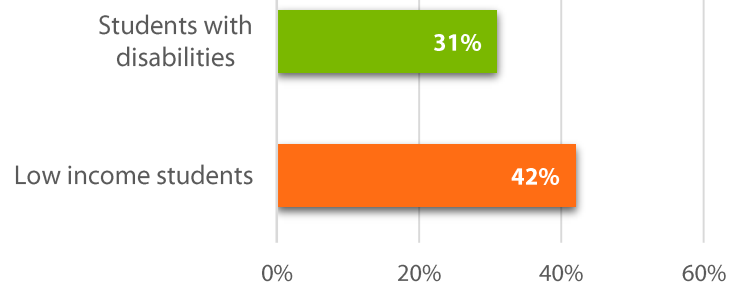
**CAREER CLUSTER**



## BACKGROUND

The **Heating, Ventilation and Air Conditioning (HVAC)** program of study at **Upper Valley Career Center (UVCC)** in Piqua, Ohio began 19 years ago and, in large part due to its dedicated staff and administration, has become a model program, with exemplary business partnerships, extensive job placement opportunities and strong alignment with multiple college degrees and certification programs. This program of study excels at providing its students with the skills they need to enter postsecondary education or a living wage career.

## About Upper Valley Career Center HVAC Students



## A CLEAR PATHWAY TO SUCCESS

Whether students who graduate from the HVAC program of study wish to continue their education or enter the workplace directly after high school, they are given clear pathways to take their next steps. Developed in conjunction with Edison Community College and Sinclair Community College, and aligned to Ohio's academic and CTE standards, many of the high school classes are designed to be college-level courses, allowing students to earn up to **18 college credits** upon graduation.



*"[Students] have HVAC technical skills as well the more important soft skills they are learning during their time in the program, which they will be [using] for the rest of their lives."*

**Nathan Burns, Account Executive, Emerson Climate Technologies, Upper Valley Career Center Alumni**

As students enter their junior year, they can expect to gain foundational skills in the Architecture & Construction Career Cluster – sheet metal fabrication, construction safety and crew leadership, hand tool identification, basic plumbing, brazing and soldering, electrical skills, and begin to read basic blueprints. As seniors, students begin to build on and apply these skills to HVAC. Students also have the opportunity to earn **seven industry credentials** such as the OSHA 10 and 30 hour, NCCER Core and HVAC Level I, EPA 608 and Refrigerant Cooling, take dual enrolment courses or start a pre-apprenticeship program.

## MEANINGFUL PARTNERSHIPS

What truly sets this program apart is the multitude of highly engaged partners representing business, industry, postsecondary education and the broader community.

Business partners like Emerson Climate Technologies and Rieck Mechanical Services help develop curriculum, provide internships for students and externships for teachers, and donate equipment. Upper Valley Career Center's postsecondary education partners include both two- and four-year institutions, offering articulation agreements to ensure students earn college credit that then connect into a 2+2+2 model, putting students on track to complete a bachelor's of science degree if they choose.

*"It has been rewarding to see this program grow in size and achievement, but equally gratifying to see so many students of the program grow into adulthood as successful, professional contributors to the HVACR industry."*

**Ken Monnier, VP, A/C Engineer,  
Emerson Climate Technologies**

Along with an advisory committee of over **40 engaged partners** like those mentioned above, UVCC has worked closely with partners to tackle the legal barriers to connect its students with pre-apprenticeship opportunities. Through a collaboration between Pipefitters Local 162 MES, Sheet Metal Workers Local Union #24 and the Ohio Department of Education, HVAC seniors now can begin pre-apprenticeships using the school's two weeks on/two weeks off model, where students attend class for two weeks and then work in the field for two weeks.

Finally, HVAC students are practicing their knowledge and skills in their community, providing free home energy audits to interested parties, as part of a required interdisciplinary project in science and HVAC, and designing and installing HVAC systems for specialized homes for the developmentally-disabled in partnership with Champaign Residential Services Inc.

## STUDENT SUCCESS BY THE NUMBERS

So what does all this mean? As the data below show, the HVAC program at Upper Valley Career Center, composed of 36 juniors and seniors in 2014, is truly Excellence in Action.

