

# Data and Evidence Analysis Summary – Air Conditioning Heating and Refrigeration Technician 2016

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## WTCS Comparative Data:

<https://facultyresources.westernnc.edu/wp-content/uploads/2015/11/2015-10-6011-Air-Cond-Heating-Ref-QRP-Associate-Degree-Evidence-Analysis-Report.pdf>

### Course Completion

- C or better course completion for the AHRT program ranged from 66.7% in 2011 to 70.0% in 2015. When compared to the one other college selected as a comparison group, Western ranks 2<sup>nd</sup> out of two. Northeast Wisconsin Technical College consistently out-performed Western during these years and may be worth further examination.
- Western's number of students ranged from 69 in 2011 to 44 in 2015. All colleges in the comparison group also saw a downward trend in enrollments.

### Second Year Retention

- Western's second year retention ranged from 60% in 2010 to 50% in 2015 for an average over time of 47.7%.
- When compared to the other schools in the comparison group, Western had the lowest average second year retention over the six years of measurement. Averages over the six years were 47.7% for Western and 77.7% for NWTC.
- Western's cohort size (number of starting students) ranged from 20 in 2010 to 30 in 2015. With an average of 36 first-term students declaring the program in a given year, Western has the highest enrollment of first-term students within this comparison group for 2015.

### Western's Third Year Graduation

- Western's third year graduation rate ranged from 10% in 2011 to 34.1% in 2014 with an average over the six years of 21.5%. Western's 2014 report year cohort (students starting in 2012) achieved the highest third year graduation with 34.1% of students graduating within three years.
- In a comparison to the other college, Western's third-year graduation rate (average) of 21.5% is lowest of the four.

## Labor Market Analysis October 2015

<https://facultyresources.westernnc.edu/wp-content/uploads/2015/11/2015-OCT-ACHeating-and-Refrigeration-Technology-Program-Trends.pdf>

In an analysis of the Western District and occupations associated with the field of AC, Heating & Refrigeration Technology, the following points are noted:

- From 2016-2020, these occupations are expected to grow 4.5%.
- Expectations for district trends remain lower than the state (6.5%) and national trends (6.3%).
- Job distribution throughout the district has an extremely high concentration in La Crosse County and moderate distribution in Monroe County. As a result, this program lends itself to continue strengthening programming at the La Crosse campus.
- This program includes occupations with an aging population, 35% of those employed are 45 years of age or older. The smallest segment of workers is the 65+ year old population with 2.0%. The high school population of students may benefit from greater exposure to the occupations and benefits of working in HVAC occupations.
- Earnings for graduates of this program (median) are strong at \$23.18 The variety of positions that serve the AHRT field require a variety of education experiences.
- Possible opportunities include looking to high schools for transcribed credit, a closer coordination with Building Science and Energy Management courses.

## Student Satisfaction Trends

The Noel Levitz Student Satisfaction Inventory was conducted in the fall of 2015. The instrument asks students to rate the importance AND the satisfaction with 95 items (1-7 with 7 as highest) related to the following “scales”:

- Instructional effectiveness
- Academic advising/counseling
- Concern for the individual
- Registration effectiveness
- Admissions and financial aid
- Student centeredness
- Campus climate
- Academic services
- Service excellence
- Safety and security
- Campus support services and responsiveness to diverse populations

In the program self-study process (data and evidence analysis work), programs are asked to identify gaps between importance and satisfaction. Gaps are calculated as the difference between the importance of an item and the satisfaction level. Gaps that are close to a “1” should be discussed and explored – particularly if they are tied to items that are rated as high in importance for students.

This survey had 13 students respond. The students in air conditioning/heating rated their overall satisfaction with their experience at Western at 5.00 which is slightly lower than how all students rated (5.72).

A more detailed analysis was conducted at the “item” level. Items are associated with one or more “scales” and provide additional insight into specific areas.

In this survey, there were no items rated **highest in importance** for AC & HR Technician students that scored a 6.75+ (scale of 1-7 with 7 as very important).

Note that the students in this program seemed to associate a higher level of importance to many items as compared to students in other programs. This resulted in several items with larger gaps between importance and satisfaction. Items that may be topics of discussion for this program include:

- Item #13 – Financial aid awards are announced to students in time to be helpful in college planning. (1.17)
- Item #35 – Policies and procedures regarding registration and course selection are clear and well-publicized. (1.08)
- Item #39 – The amount of student parking space on campus is adequate. (2.20)
- Item #42 – The equipment in the lab facilities is kept up to date. (1.00)
- Item #72 – Campus: The Wellness Center meets my fitness needs. (1.01)

## Student Learning Outcomes Assessment Trends

<https://facultyresources.westernnc.edu/wp-content/uploads/2014/07/2AirConditioningHeatingRefrigerationTechS-1.pdf>

Your program had 10 responses to the survey. Items that may be topics of discussion for this program include:

- Celebrate the good feedback you received about the real-life application of concepts and the variety of courses included in the program. Students seem to really appreciate the hands-on learning.
- There are some suggestions for improvement from the students. It might be valuable to look at past survey results to identify trends in the qualitative feedback received from students. Those results are housed on the Program Excellence web site.
- A couple of students commented about the need for even more hand-on training especially in the commercial side of the program. This may be something to explore in more depth.
- The majority of the students either strongly agreed or agreed that they were able to learn and master both the program outcomes and the Core Abilities.

## Graduate Follow-Up Trends

Year	2012-13
Types of jobs obtained	Engineer HVAC Maintenance HVAC Service Technician Service Technician
Companies hiring Western graduates	Trane, La Crosse, WI Service Management Systems, Onalaska, WI Schmitz Refrigeration, Caledonia, MN Deml Controls, La Crosse, WI

Year	2013-14
Types of jobs obtained	HVAC Service Technician Service Technician Sheet Metal Journeyman
Companies hiring Western graduates	WHV, Winona, MN Multistack, Sparta, WI Ledegar Sheet Metal Inc., La Crosse, WI

Year	2014-15
Types of jobs obtained	Technician
Companies hiring Western graduates	Niebuhr Plumbing & Heating, La Crosse, WI

## Career Pathways Self-Survey

- Your program had 23 responses to the survey. Five were full-time faculty; fifteen were advisory members, one dean/associate dean, one Western staff member and one Academic Advisor.
- Items that may be topics of discussion for this program include:
  - In the area of course sequencing, there appears to be some disagreement or uncertainty as to whether or not this program offers transcribed credit to area HS graduates and the option to enter the program at various entry points.
  - There appears to be an opportunity to develop Credit for Prior Learning.
  - There appears to be potential to collaborate with BIS.
  - In many cases, there are “unknowns” and “neither agree nor disagree” responses.
  - Your program had a tremendous response rate on this survey and many of the areas can help drive future team discussions.