



Heating, Ventilation & Air Conditioning/Refrigeration (HVAC/R)

**Wisconsin Indianhead Technical College
32-601-1 Two-Year Technical Diploma**

**2018
Program Review**

ACADEMIC PROGRAM REVIEW PROFILE

Program Number & Name: Heating, Ventilation & Air Conditioning/Refrigeration (HVAC) 32-601-1		
Program Academic or Assistant Dean	Title and Location	Phone and e-mail
Karen Hoglund	Academic Dean - Technology & Industry	715-682-4591 Ext. 3138 karen.hoglund@witc.edu
Team Lead(s)	Title and Location	Phone and e-mail
<i>Example:</i> <i>Bill Smith</i>	<i>Welding Faculty Member</i> <i>New Richmond</i>	<i>Ext. 9999</i> <i>bill.smith@witc.edu</i>
Frank Vidas	HVAC/R Faculty Member Superior	715-394-6661 Ext. 5322 frank.vidas@witc.edu
Team Members	Title and Location	Phone and e-mail
Amy Pozniak	Business Instructor Superior	715-394-6661 Ext. 6377 amy.pozniak@witc.edu
Dede Maki	Counselor Superior	715-394-6661 Ext. 6213 dede.maki@witc.edu
Terry Glanville	Automotive Instructor Superior	715-394-6661 Ext. 6277 Terry.glanville@witc.edu
James Miller	IT User & Desktop Administrator Superior	715-394-6661 Ext. 6356 James.Miller@witc.edu
Derrick Rouse	WITC HVAC student Superior	 rousemd@my.witc.edu
<p style="color: red; margin: 0;">**If you have more than 8 team members, right click the within the member table above and choose insert row above or below.</p>		
Self-Study Areas:		
Required Elements: Analysis of trends from Program Effectiveness Data Profile, Analysis of results of previous program improvement plans, Progress/results of TSA (including program & employability essentials)		

Choose from a minimum of 2 of the following other areas to study	<input type="checkbox"/> Academic Advising <input checked="" type="checkbox"/> Accreditation/National or State Standards, Regulations, Compliance <input type="checkbox"/> Advisory Committees <input type="checkbox"/> Assessment of Student Learning <input type="checkbox"/> Budgeting Efficiencies/Costs per FTE <input type="checkbox"/> Career Outlook/Future Occupational Trends <input checked="" type="checkbox"/> Career Pathways <input type="checkbox"/> Collaboration/Partnerships <input type="checkbox"/> Curriculum Currency/modifications <input type="checkbox"/> Delivery Methods/Distribution of Offerings/Scheduling <input type="checkbox"/> Dual Enrollment <input type="checkbox"/> Equipment <input type="checkbox"/> Facilities <input type="checkbox"/> Faculty Credentialing/Development Needs <input type="checkbox"/> Online/Technology <input type="checkbox"/> Recruitment <input type="checkbox"/> Other _____	
Program Information:		
Capacity (new students admitted/year):	16	
Number of Faculty:	FT: <input checked="" type="checkbox"/> 1	PT: <input checked="" type="checkbox"/> 1
Statewide Curriculum:	Yes? <input type="checkbox"/>	No? <input checked="" type="checkbox"/>
Program Accredited by:		
Date of Last Accreditation		
Date of Next Accreditation		
Is a visit required? If so, when is the next visit?		
Program Licensed by:		
Date of Last Licensing:		
Date of Next Licensing:		
Is a visit required? If so, when is the next visit?		
Please list other program and individual association and organizational memberships:		
NC3		

SELF-STUDY CATEGORY RESULTS

Program and Category			
Program: HVAC			
Category: Analysis of Trends from Program Data Profile			
Resources Contact(s) for this Category:			
Strengths		Opportunities	
Graduate satisfaction is very high at 100% for 2014-15 and 2016-17		General Studies completions rates are low in the last 3 years. Math 364 - 75% for FY 17	
Program enrollment numbers are strong at 16-18		Refrigeration Fundamentals course completion at 85% for FY17	
Graduates hired within their field is 90-100%		Job outlook decrease from 2016 - 2021 took a 2% decrease from 271 to 266 jobs in 11 WI counties	
Perkins transfer data is 0.00% everyone finishes within the 2 years without transfer			
Jan 2016-Dec 2016 - 3 avg job postings and 18 Avg monthly hires			
Job outlook increase between 2016-2021 by 3.8% statewide and 6.6% nationwide			
**If you have more than 8 strengths and opportunities, right click the within the table above and choose insert row above or below.			
What items in this category MUST be addressed on our improvement plan?		General studies completion rates low in the last 3 years. Refrigeration Fundamentals course completion low	
What items in this category MIGHT be addressed on the improvement plan?			
Team Rating			
Please indicate by an (X) the team rating of your program on this category.			
<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations —few areas need improvement</i>	<i>Exemplary—all areas exceed expectations—use as a model for other programs</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category
Program: HVAC

Category: Analysis of results of previous program improvement plans			
Resources Contact(s) for this Category:			
Strengths		Opportunities	
5 - NC3 program upgrades have all been added to the program students are getting certified as they progress through the program.		Additional NC3 program upgrades have been developed and can be implemented into the current program.	
Frank and general studies instructors have collaborated to align the general studies classes with NC3 model		General studies courses continue have lower completion rates	
New complete redesign and remodel of HVAC/R lab has been implemented to remove all barriers to student learning		Student Services staff and general studies faculty are not always present to advisory committee meetings	
Student services staff and general studies faculty have continued to be invited to advisory committee meetings			
TSA implementation required less program outcomes and continues with the HVAC/R state standards			
**If you have more than 8 strengths and opportunities, right click the within the table above and choose insert row above or below.			
What items in this category MUST be addressed on our improvement plan?		<p>General studies courses continue to have lower completion rates - This will increase by 5%</p> <p>Student services staff and faculty will be encouraged to attend 2 HVAC/R advisory committee meetings per year.</p> <p>At time of review there were 5 certifications, Since the review WITC added 2 more certifications. 3 additional NC3 certifications will be added to the HVAC/R curriculum for a total of 10 certifications</p>	
What items in this category MIGHT be addressed on the improvement plan?		N/A	
Team Rating			
Please indicate by an (X) the team rating of your program on this category.			
<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations —few areas need improvement</i>	<i>Exemplary—all areas exceed expectations—use as a model for other programs</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category			
Program: HVAC			
Category: Progress/results of TSA (includes program outcomes and Employability Essentials)			
Resources Contact(s) for this Category:			
Strengths		Opportunities	
TSA Phase I is approved		Students will be notified that WITC will begin collecting data related to TSA for the incoming first year students	
TSA Phase II has been sent to the state for approval for incoming fall students		Students will check off with Frank each semester on the Met/Not Met option for each competency.	
		WITC will report data for students to the state beginning spring 2020	
**If you have more than 8 strengths and opportunities, please see SPOL instructions for adding rows.			
What items in this category MUST be addressed on our improvement plan?	<p>Students will be notified that WITC will begin collecting data related to TSA for the incoming first year students</p> <p>Students will check off with Frank each semester on the Met/Not Met option for each competency.</p> <p>WITC will report data for students to the state beginning spring 2020</p>		
What items in this category MIGHT be addressed on the improvement plan?	N/A		
Team Rating			
Please indicate by an (X) the team rating of your program on this category.			
<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations —few areas need improvement</i>	<i><u>Exemplary</u>—all areas exceed expectations—use as a model for other programs</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category			
Program: HVAC			
Category: Accreditation/National or State Standards, Regulations, Compliance			
Resources Contact(s) for this Category:			
Strengths		Opportunities	
Currently HVAC/R program offers 7 NC3 certifications within the program		Frank will certify in 3 more certifications to offer the students this school year for a total of 10	
Frank is certified by NC3 to administer the certification exams and approve the certification to each student		Annually Frank will have to certify in additional certifications to offer	
Opportunities of new NC3 certifications are created annually		Evening and weekend offerings could be available by having additional NC3 certifications increasing FTE	
The current certifications allow students to be more employable in their field			
We are the only technical college in the northern region to offer NC3 certifications			
State of the art lab standards were upgraded two years ago to make WITC an NC3 certified training facility for community members and outside businesses			
**If you have more than 8 strenghts and oportunities, please see SPOL instructions for adding rows.			
What items in this category MUST be addressed on our improvement plan?		Frank will certify in 3 more certifications to offer the students this school year for a total of 10 Annually Frank will have to certify in additional certifications to offer	
What items in this category MIGHT be addressed on the improvement plan?		Evening and weekend offerings could be available by having additional NC3 certifications increasing FTE	
Team Rating			
Please indicate by an (X) the team rating of your program on this category.			
<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations —few areas need improvement</i>	<i>Exemplary—all areas exceed expectations—use as a model for other programs</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Additional Comments: (optional)			

SELF-STUDY CATEGORY RESULTS

Program and Category			
Program: HVAC			
Category: Career Pathways			
Resources Contact(s) for this Category:			
Strengths	Opportunities		
Program is offered in the daytime leaving time at night to offer 1 or several career pathway options	Program is offered in the daytime leaving time at night to offer 1 or several career pathway options		
	The need for short term technical training has been determined by advisory committee - 1 year option will be created		
	Modify curriculum to offer short term certificates		
**If you have more than 8 strengths and opportunities, please see SPOL instructions for adding rows.			
What items in this category MUST be addressed on our improvement plan?	Program is offered in the daytime leaving time at night to offer 1 or several career pathway options The need for short term technical training has been determined by advisory committee - 1 year option will be created		
What items in this category MIGHT be addressed on the improvement plan?	Modify curriculum to offer short term certificates for evening or weekend options in the areas of : Air Conditioning Gas Heating and Airflow Oil, Electric and Hydronic Heating Refrigeration		
Team Rating			
Please indicate by an (X) the team rating of your program on this category.			
<i>All areas need improvement</i>	<i>Some areas meet expectations, but most areas need improvement</i>	<i>All areas meet expectations —few areas need improvement</i>	<i>Exemplary—all areas exceed expectations—use as a model for other programs</i>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments: (optional)			

ACADEMIC PROGRAM IMPROVEMENT PLAN

PROGRAM:	HVAC
Defined Outcome	Increase completion rates of Applied Technical Math 2 and Refrigeration Fundamentals by 10%. Currently Applied Technical Math 2 completion rate is 75% for FY 17 and Refrigeration Fundamentals is at 85% for FY17

Metric (How will you measure whether or not the outcome has been attained successfully?)**Enter answer below - data has been collected to show current completion rates and same data will be collected after the improvement plan is in effect*

Action Plan/Action Items & Person(s) Responsible:

Example: 1) Action Item #1 (Damian VonFrank, Ted May)

Timeline & Resources:

Example: 1) Fall 2018 – Need IT time to implement

Work with Ingrid to build an outcome into the math class for students to build their mastery of the subject matter by requiring the students to visit the math lab to get additional help to be more successful

Karen and Ingrid - Fall 2019 - Math labs are not in effect yet

Work with Frank to build an outcome into Refrigeration Fundamentals to utilize a peer tutor to get the additional help needed to be more successful

Karen and Frank - Fall 2019

Run data to create current benchmarks

Karen - Spring 2019

Run data to compare after each time the courses run

Karen - December 2019

****If you have more than 8 action items, please see SPOL instructions for adding rows.**

Note: (A mid-year and year-end update will be required each year during implementation.)

Implementation Update (June 30, 2019):

Instructions: Enter update text in box below, check a box below, and enter metric and results

Plans to implement early alert to counselors from the Math team to ensure Math tutors are available in the first 2 weeks of class. Implement Math labs at start of semester.
Do a review of FY19 Refrigeration Fundamentals course data to establish and average.

<input type="checkbox"/> Met (include metric result)	
<input type="checkbox"/> Partially Met (include metric)	
<input checked="" type="checkbox"/> Not Met (include metric)	Applied Tech Math went from 75% to 58.3% in FY18. Refrigeration Fundamentals went from 85% to 81.3% in FY18.

Divisional Dean Comments:

VP, Academic Affairs Comments:

Implementation Update (January 31, 2020):

<input type="checkbox"/> Met (include metric result)	
<input type="checkbox"/> Partially Met (include metric)	
<input type="checkbox"/> Not Met (include metric)	

Divisional Dean Comments:

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VP, Academic Affairs Comments:

Implementation Update (June 30, 2020):

<input type="checkbox"/> Met (include metric result)	
<input type="checkbox"/> Partially Met (include metric)	
<input type="checkbox"/> Not Met (include metric)	

Divisional Dean Comments:

“Effective March 25, 2020, Wisconsin Governor Evers directed a safer-at-home directive due to the Covid-19 pandemic. Under this order, all WITC Spring 2020 classes were delayed, cancelled or moved to an alternative delivery method. Due to the many required hours instructors and staff spent moving curriculum to alternate delivery modes, college leadership held requirement of the 6-month academic program review updates due June 1, 2020. Program review updates will next be required of this program in January 2021.”

VP, Academic Affairs Comments:

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Implementation Update (January 31, 2021):

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Divisional Dean Comments:

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VP, Academic Affairs Comments:

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Implementation Update (June 30, 2021):

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Divisional Dean Comments:

VP, Academic Affairs Comments:

Implementation Update (January 31, 2022):

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Divisional Dean Comments:

VP, Academic Affairs Comments:

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Divisional Dean Comments:

VP, Academic Affairs Comments:

Implementation Update (January 31, 2023):

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<input type="checkbox"/> Not Met (include metric)	

Divisional Dean Comments:

VP, Academic Affairs Comments:

ACADEMIC PROGRAM IMPROVEMENT PLAN

PROGRAM:	HVAC	
Defined Outcome	Increase NC3 certifications within the program from 7-10 and make public.	
Metric (How will you measure whether or not the outcome has been attained successfully?) <i>*Enter answer below</i>		
Currently Frank has 7 certifications for NC3, he will receive certification and completion certificates for each one obtained		
Action Plan/Action Items & Person(s) Responsible: <i>Example: 1) Action Item #1 (Damian VonFrank, Ted May)</i>		Timeline & Resources: <i>Example: 1) Fall 2018 – Need IT time to implement</i>
Frank - attend training to obtain additional certifications		Summer 2019 - Gateway TC - only offered in the summer
Frank - update curriculum to include certifications within program and order new equipment that will be needed to teach the certifications within the program.		Summer 2019 -curriculum dollars to building into curriculum. cost of new equipment needed.
Marketing - Create banners of the certifications that are offered within the program to hang in the HVAC lab for current and prospective students to see		Spring 2019 - printing costs
Christy Roshell - Update program curriculum checklists and web to advertise the certifications within the program		Spring 2019 - time to enter
Charlie Glazman - Contracts to offer the certifications at night or weekends for professionals in the field		Fall 2019 -Allow new certifications to get into the program
<p>**If you have more than 8 action items, please see SPOL instructions for adding rows.</p> <p>Note: (A mid-year and year-end update will be required each year during implementation.)</p> <p>Implementation Update (June 30, 2019):</p> <p>Instructions: Enter update text in box below, check a box below, and enter metric and results</p>		
<p>The NC3 certifications will be added to the web and to the curriculum checklists by Feb. 2020. Banners of certifications will be completed by Spring 2020. Currently working on contract between WITC and Gordon Correctional Facility to offer Refrigeration Essentials to inmates as an evening offering beginning in Jan. of 2020.</p>		
<input checked="" type="checkbox"/> Met (include metric result)	<p>WITC NC3 certifications have increased from 7 to 12. This has been documented in the WITC catalog.</p> <p>NC3 certifications: HVAC/R Certifications: Students are eligible to take the following NC3 Certification Exams: Indoor Air Quality, Building Performance Instruments (BPI) - Leak Detection, Air to Air Heat Pumps and Conditioners, Building Performance Instruments (BPI) - Five Gas Analysis, 575 Multi Meter Certification, Building Performance Instruments (BPI) - Installations and Diagnostics, Residential - Variable Speed Motors, Building Performance Instruments (BPI) - Fluid</p>	

	Integrity, Building Performance Instruments (BPI) - RPM and Vibration Testing and Residential Refrigeration Diagnostics
<input type="checkbox"/> Partially Met (include metric)	
<input type="checkbox"/> Not Met (include metric)	

Divisional Dean Comments:

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VP, Academic Affairs Comments:

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Divisional Dean Comments:

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Divisional Dean Comments:

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VP, Academic Affairs Comments:

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Divisional Dean Comments:

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VP, Academic Affairs Comments:

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Divisional Dean Comments:

VP, Academic Affairs Comments:

ACADEMIC PROGRAM IMPROVEMENT PLAN

PROGRAM:	HVAC	
Defined Outcome	Create two embedded technical diploma pathways within the HVAC/R program for students to earn additional credentials within the program	
Metric (How will you measure whether or not the outcome has been attained successfully?) <i>*Enter answer below</i>	Currently there aren't any pathways, so it will be represented on the curriculum checklists and approved by WTCS	
Action Plan/Action Items & Person(s) Responsible: <i>Example: 1) Action Item #1 (Damian VonFrank, Ted May)</i>	Timeline & Resources: <i>Example: 1) Fall 2018 – Need IT time to implement</i>	
Frank and Christy Roshell & Karen Hoglund - Decide where the pathways will be created	Spring 2019	
Frank, Christy and Karen - Create pathways after first and second semester by deciding what courses to put together	Spring 2019	
Christy Roshell - Submit pathways to state WTCS for approval	Spring 2019	
Christy Roshell - Complete new curriculum checklists and webpage to reflect new pathways	Spring 2019	
Frank - Implement new pathways into program	Fall 2019	
Karen Hoglund - Communicate to student services to inform them of the new pathways and when they will be awarded	Fall 2019	
**If you have more than 8 action items, please see SPOL instructions for adding rows.		

Note: (A mid-year and year-end update will be required each year during implementation.)

Implementation Update (June 30, 2019):

Instructions: Enter update text in box below, check a box below, and enter metric and results

Created Refrigeration Essentials - 14 credits (1 semester) and Installation Technician - 27 credits (1 year) - both started Fall 2019. Marketing is currently being done to promote new pathways.

<input checked="" type="checkbox"/> Met (include metric result)	See curriculum checklist linked below
<input type="checkbox"/> Partially Met (include metric)	
<input type="checkbox"/> Not Met (include metric)	

Divisional Dean Comments:

VP, Academic Affairs Comments:

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Divisional Dean Comments:

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