# Wayne Community College Program Review – 2021-2022

Name of Program: Air Conditioning, Heating, and Refrigeration Technology

#### **Section 1: Program Overview**

Mission/Purpose: As part of the review cycle, programs are asked to formally evaluate their mission/purpose statement.

Please provide your current mission/purpose statement.

The purpose of the Air Conditioning, Heating, and Refrigeration Technology program is to provide students with the basic knowledge to develop skills necessary to work with residential and light commercial HVAC systems.

Are you planning to revise your mission/purpose statement? If so, please provide your revised mission/purpose statement and reason for the change.

No Change

Describe how the program's mission aligns with the College's vision, mission, core values, and strategic goals. Identify which Institutional Goal(s) best align with your program and explain why.

Goal 1: Increase Student Access Goal 2: Ensure Program Excellence Goal 3: Improve Student Success Goal 4: Ensure Institutional Quality

The Air Conditioning, Heating, and Refrigeration program meets the College's Mission of training students in our community. Completers should qualify for employment in a variety of positions including HVAC and Refrigeration service and installation in residential, commercial, and industrial companies and other HVACR organizations. The College's reputation for excellence for quality programs provides students with increased marketability.

**Associates, Diplomas, Certificates, and Pathways Offered:** Please list all associates, diplomas, certificates, and pathways offered in the table below.

Program Type	Program Title
(Associate, Diploma, Certificate, or Pathway)	
Diploma	Air Conditioning, Heating, and Refrigeration Diploma
Certificate	Comfort Cooling Certificate (D3500)
Certificate	Heating Technology Certificate (C35100HT)
Certificate	Heat Pump Certificate (C35100HP)

Activities to ensure program is current (2019-20; 2020-21; 2021-22 – Academic Year, Fall, Spring, Summer) List program curriculum changes, revisions, and/or deletions.

Curriculum Changes	Date – Updated / Revised / Deleted
No Curriculum Changes	

Provide an overview of the significance of the program changes and improvements that occurred over the past three years. (What were the program's / discipline's goals and rationale for expanding and improving student learning, including new courses, program degrees, certificates, diplomas, and/or delivery methods?)

No Changes during this cycle but there are plans to bring new NC3 curriculum, training and certifications into the program by Fall of 2023.

Advisory Committee: dates, summary of minutes, activities (2019-20; 2020-21; 2021-22 – Academic Year – Fall, Spring, Summer)

#### **Summary of Advisory Committee Activities**

Year	Meeting Dates	Recommendations / Activities
2019-2020	10-9-2019	Discussed NC3/Trane Residential Cert. Equipment
2020-2021	11-19-2020 / 7-19-2021	Discussed possible renovations of the HVAC lab and class
		area
2021-2022	11-1-2021 / 5-4-2022	Discussed possibility of a new building and moving from
		current space. And the Engineering and manufacturing
		Showcase.

(Ensure that Advisory Committee Meeting Minutes are filed in the IE Shared Program Folder.)

Provide narrative for analysis of trends in the field or industry (emerging needs) that contribute to maintaining program relevance. (Based on advisory committee suggestions, environmental scans, industry demands, and other sources external to the program/discipline, how well is the program/discipline responding to the current and emerging needs of the industry and/or community? What resources might your program need?

The advisory board is a way to give us feedback and information on how the HVAC field has changed and new training that is required. By getting this feedback we can ensure the program is producing the best students that will be career ready when they graduate.

# **Section 2: Program Outcomes**

# Outcome #1: Enrollment (unduplicated)

**Baseline:** 18 # (Average of total enrollment for the last three years – 2018-19; 2019-20; 2020-21)

Standard: 19 # Target: 20 #

# **Program Enrollment**

Program Enrollment (unduplicated)			
Academic Year (Fall, Spring, Summer)	Enrollment		
2018-2019	22		
2019-2020	21		
2020-2021	12		

# **Enrollment by Ethnicity, Gender, and Age**

	0040 0040		2040 2020		2020-2021	
	2018-20		2019-2020			
Ethnicity & Gender	N	%	N	%	N	%
African American, Female American Indian/Alaskan Native,	0	0.0%	0	0.0%	0	0.0%
Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female Hawaiian/Other Pacific Islander,	0	0.0%	0	0.0%	0	0.0%
Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	0	0.0%
African American, Male American Indian/Alaskan Native,	1	4.5%	7	33.3%	4	33.3%
Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	0	0.0%	1	4.8%	1	8.3%
Caucasian, Male Hawaiian/Other Pacific Islander,	15	68.2%	9	42.9%	5	41.7%
Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	5	22.7%	3	14.3%	2	16.7%
Two or More Races, Male	1	4.5%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	1	4.8%	0	0.0%
Male Total	22	100.0%	21	100.0%	12	100.0%
Total	22	100.0%	21	100.0%	12	100.0%

	2018-20	19	2019	-2020	2020	-2021
Ethnicity & Age Range	N	%	N	%	N	%
African American, Under the age of						
18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,		0.00/		0.00/		0.00/
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, Under the age of 18	0	0.00/	_	0.00/		0.00/
Hispanic/Latino, Under the age of	U	0.0%	0	0.0%	0	0.0%
18	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Under the age	ŭ	0.070	Ů	0.070		0.070
of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	0	0.0%	0	0.0%	0	0.0%
African American, 18-24	1	4.5%	5	23.8%	2	16.7%
American Indian/Alaskan Native,		,			_	
18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	9	40.9%	5	23.8%	4	33.3%
Hawaiian/Other Pacific Islander, 18-						
24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	4	18.2%	3	14.3%	2	16.7%
Two or More Races, 18-24	1	4.5%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	15	68.2%	13	61.9%	8	66.7%
African American, 25-44	0	0.0%	1	4.8%	2	16.7%
American Indian/Alaskan Native,						
25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	4	18.2%	3	14.3%	1	8.3%
Hawaiian/Other Pacific Islander, 25-						
44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	4.5%	0	0.0%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	5	22.7%	4	19.0%	3	25.0%
African American, 45-64	0	0.0%	1	4.8%	0	0.0%
American Indian/Alaskan Native,		0.00/		0.00/		0.00/
45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	1	8.3%
Caucasian, 45-64	2	9.1%	1	4.8%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.09/	0	0.09/	0	0.09/
		0.0%	0	0.0%		0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	1	4.8%	0	0.0%
45-64 Total	2	9.1%	3	14.3%	1	8.3%
African American, 65+ American Indian/Alaskan Native,	0	0.0%	0	0.0%	0	0.0%
65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	1	4.8%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,		0.070		0.070		0.070
65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	1	4.8%	0	0.0%
Total	22	100.0%	21	100.0%	12	100.0%
Iotai	22	100.0%	Z1	100.0%	12	100.0%

**Provide narrative for analysis of program enrollment.** (Is enrollment increasing or decreasing? What are possible reasons for increase/decrease? Describe any action plans to improve or increase program enrollment.)

Student enrollment went down the major cause of this was COVID 19 but the data also shows the lack of female students in the program. We need to increase recruitment events to try to not only increase numbers across the board but also try to focus on female students to increase our enrollment numbers.

#### **Identify Enrollment Action Items**

Item	Action Items (What actions can be taken to	Assessment of Action Items (How will you assess the
	increase enrollment in your program?)	results of action items?)
1	Attending more recruitment events.	Check enrollment numbers to see if it increases after events
2	Increased program presence on social media	Check enrollment numbers after social media post to determine interest to post.

#### Outcome #2: Retention

**Baseline: 75.9** % (Average of last three years – 2018-19; 2019-20; 2020-21; program retention)

Standard: 80 % Target: 85 %

Year	Program Retention Rate
2018-2019	93.8%
2019-2020	62.5%
2020-2021	71.4%

# Retention by Ethnicity, Gender, and Age

	Fall 2018 to				Fall 2020 t	
	2019		2020		2021	
Ethnicity & Gender	N	%	N	%	N	%
African American, Female	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,						
Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,						
Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	0	0.0%
African American, Male	0	0.0%	2	20.0%	1	20.0%
American Indian/Alaskan Native,						
Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	0	0.0%	1	10.0%	0	0.0%
Caucasian, Male	12	80.0%	6	60.0%	3	60.0%
Hawaiian/Other Pacific Islander,						
Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	2	13.3%	1	10.0%	1	20.0%
Two or More Races, Male	1	6.7%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	15	100.0%	10	100.0%	5	100.0%
Total	15	100.0%	10	100.0%	5	100.0%

	Fall 2018 to 2019			o Summer	Fall 2020 t	
Ethnicity & Age Range	N	%	N	%	N	%
African American, Under the age						
of 18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,						
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,						
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of		0.00/		0.00/	_	0.00/
Two or More Races, Under the	0	0.0%	0	0.0%	0	0.0%
age of 18	0	0.0%	0	0.0%	0	0.0%
ľ						
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total		0.0%	0	0.0%	0	0.0%
African American, 18-24 American Indian/Alaskan Native,	0	0.0%	2	20.0%	1	20.0%
18-24	0	0.0%	0	0.0%	_	0.0%
			-	0.0%	0	
Asian, 18-24	0	0.0%	0		0	0.0%
Caucasian, 18-24 Hawaiian/Other Pacific Islander,	7	46.7%	3	30.0%	2	40.0%
18-24	0	0.0%	0	0.0%	0	0.0%
	2	13.3%	1	10.0%	1	20.0%
Hispanic/Latino, 18-24						
Two or More Races, 18-24	1	6.7%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total		66.7%	6	60.0%	4	80.0%
African American, 25-44	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 25-44		0.00/		0.00/	_	0.00/
	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	3	20.0%	2	20.0%	1	20.0%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total		20.0%	2	20.0%	1	20.0%
African American, 45-64	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,		0.00/		0.00/		0.00/
45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	2	13.3%	1	10.0%	0	0.0%
Hawaiian/Other Pacific Islander,		0.007		0.007	_	0.007
45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	2	13.3%	1	10.0%	0	0.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,		0.05:		0.00:	_	0.00:
65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	1	10.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,	_		_			
65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	1	10.0%	0	0.0%
Total	15	100.0%	10	100.0%	5	100.0%

**Provide narrative for analysis of program retention data.** (Based on the data, provide a narrative of your analysis of retention. Indicate factors that may have affected your retention. State any changes you plan to make to improve retention.)

Student retention was affected by Covid 19 which caused a dent in retention. The data shows that students between 25-44 have the lowest retention rates. We need to put more focus on this group and track the performance during the year to find any trends to why this age group has lower retention numbers

#### **Identify Retention Action Items**

Item	Action Items (What actions can be taken to	Assessment of Action Items (How will you assess the
	increase program retention?)	results of action items?)
1	Implement activities for student engagement	Interview students towards the end of semester to
		see if activities were effective
2	Offer more 1 on 1 training for students.	Offer students 1 on 1 training so they can better
		understand the material, which will lead to better
		retention numbers.

# Outcome #3: Completers (unduplicated) (Degree level, highest level of attainment)

**Baseline: 21** # (*Average of total completers for the last three years – 2019-20; 2020-21; 2021-22*)

Standard: 22 # Target: 23 #

Number of Completers (unduplicated) – Graduation Year – Summer, Fall, Spring			
<b>Graduation Year</b>	Total Completers		
2019-2020	29		
2020-2021	15		
2021-2022	20		

# Completers by Ethnicity, Gender, and Age

	2019-2020		2020-2021		2021-2022	
Ethnicity 9 Condor	N	-2020 %	N	% %	N 2021	-2022 %
Ethnicity & Gender						
African American, Female American Indian/Alaskan Native,	0	0.0%	0	0.0%	0	0.0%
Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,						
Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	0	0.0%
African American, Male	6	20.7%	3	20.0%	4	20.0%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	0	0.0%	1	6.7%	1	5.0%
Caucasian, Male	19	65.5%	8	53.3%	12	60.0%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	4	13.8%	3	20.0%	3	15.0%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	29	100.0%	15	100.0%	20	100.0%
Total	29	100.0%	15	100.0%	20	100.0%

		-2020	2020			-2022
Ethnicity & Age Range Table	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,	U	0.0%	0	0.0%	U	0.0%
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,	ŭ	0.070		0.070	ŭ	0.070
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18	0	0.0%	1	6.7%	0	0.0%
Two or More Races, Under the age of	•	0.00/		0.00/		0.00/
18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	0	0.0%	1	6.7%	0	0.0%
African American, 18-24 American Indian/Alaskan Native, 18-	3	10.3%	2	13.3%	1	5.0%
24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	10	34.5%	3		7	
Hawaiian/Other Pacific Islander, 18-	10	34.5%	3	20.0%	/	35.0%
24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	4	13.8%	2	13.3%	3	15.0%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	17	58.6%	7	46.7%	11	55.0%
African American, 25-44	1	3.4%	1	6.7%	3	15.0%
American Indian/Alaskan Native, 25-	'	3.476	'	0.776	3	13.076
44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	6	20.7%	4	26.7%	1	5.0%
Caucasian, 25-44	0	0.0%	0	0.0%	3	15.0%
Hawaiian/Other Pacific Islander, 25-	Ü	0.070	Ĭ	0.070	Ü	10.070
44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	7	24.1%	5	33.3%	7	35.0%
African American, 45-64	2	6.9%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 45-						
64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	3	10.3%	1	6.7%	2	10.0%
Hawaiian/Other Pacific Islander, 45-						
64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	5	17.2%	1	6.7%	2	10.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Notice C5	^	0.007	_	0.007	_	0.007
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	1	6.7%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
·						
65+ Total	0	0.0%	1	6.7%	0	0.0%
Total	29	100.0%	15	100.0%	20	100.0%

**Provide narrative for analysis of completers.** (Based on the data, provide a narrative of your analysis of completions. Indicate factors that may have affected your completions. How might you increase the number of completers in your program?)

I think our number of completers was acceptable vs the enrollment numbers. As students go through the programs we sit down with each student and track their progress during each semester to avoid students dropping out over lack of help learning the material.

**Identify Completer Action Items** 

Item	Action Items (What actions can be taken to	<b>Assessment of Action Items</b> (How will you assess the
	increase student completion in your program?)	results of action items?)
1	Meet with students weekly to review their	Seeing if we have an increase in completers at the
	progress.	end of the semester.
2		

#### **Section 3: Other Assessments**

Do you use other methods of assessment to evaluate the effectiveness of your program, to include surveys, self-assessments, student licensure/certification, or third-party credentials?. If so, please explain how information collected from the(se) assessments can be used to improve the program.)

We do not use other methods of assessment at this time.

#### Planning Objectives (2019-20; 2020-21; 2021-22 – Fiscal Year, July 1-June 30)

Provide a summary of planning objectives submitted for the last three years, including the use of results of the planning objectives in the table provided.

**Summary of Planning Objectives** 

Planning Year	Objective(s) Submitted	Use of Results	
(Fiscal Year –			
July 1-June 30)			
2019-20	<ol> <li>Industrial Technologies - HVAC         <ul> <li>Hampden H-RST-21 Mini</li> <li>Split Heat Pump Trainer</li> <li>(Daikin)</li> </ul> </li> <li>Industrial Technologies (HVAC)         <ul> <li>One (1) Model H-HEAT-2</li> <li>Home Pressurization and Air</li> <li>Distribution System w/H-HEAT-2-MT Mobile Table (2017-18)</li> </ul> </li> </ol>	<ol> <li>Objective approved, awaiting submission of purchase. Carry forward to the 2020-21 Plan to report assessment. 2020-21 Status Report: Per Todd King, email received 6/9/2021; The HVAC program did not receive this equipment. 2020-21 Use of Results / Assessment: Per Todd King, email received 6/9/2021; The HVAC program did not receive this equipment.</li> <li>2017-18 Status Report: In process of ordering. The equipment has not shipped or arrived yet. It will be ready for use by Fall 2018. Carry forward to the 2018-19 Plan to report assessment and use of results. 2018-19 Status</li> </ol>	

		Domanti. Cation of Tusinan was dalayed dive to		
		Report: Set up of Trainer was delayed due to		
		Vendor not sending proper accessory fittings.		
		Instructor familiarization and student		
		introduction was carried forward to Spring		
		2019. Carry forward to the 2019-20		
		Plan/Budget to report assessment of the		
		objective. 2019-20 Status Report: Carry		
		forward to the 2020-21 Plan to report		
		assessment. 2020-21 Status Report: Trainer		
		was purchased and utilized in Fall 2020. 2020-		
		21 Use of Results / Assessment: We used this		
		trainer during the Fall and Spring semester to		
		help students get a better understanding of air		
		flow and pressure zones through out a home/		
		structure we were able to track the		
		improvement of students by giving quizzes		
		before and after using trainer and all students		
		performed better and showed better		
		knowledge of air flow and pressurized zones		
		after trainer was used. This trainer was a huge		
		benefit because we were able to visually show		
		air changes vs just explaining them through		
		textbook reading.		
2020-21	No planning objectives submitted.	Not applicable.		
2021-22	Engineering and Manufacturing -	Items have not been received to date. Carry		
	HVAC/R Technologies - New 20	forward to 2022-23 Plan to report assessment.		
	seer High Efficiency Variable speed			
	split system heat pump			
	spine system meat paintp			

What planning objectives (equipment, supplies, software, etc.) do you anticipate needing over the next three years? Justify the need.

Our industry has had a big push in efficiency so I see we will need more high efficiency units or trainers as well as interactive training tools.

What positions (faculty and/or staff) do you anticipate needing over the next three years? Justify the need.

There is a need for another part-time instructor as well as a lab assistant. These positions are needed to be able to implement the new programs that we are plan on introducing Spring 2023

Provide narrative for your program facility needs over the next three years. If facilities are adequate, please confirm.

There are plans to build a new building not just for HVAC but for all applied technology. This should help with current facility needs.

Provide narrative for academic / student support services needs over the next three years. (Are services adequate for your program/service?)

Incorporate Moodle and hybrid style teaching tools to give students more access to material while not increasing face to face time. Younger students seem to enjoy online setting better than traditional face to face.

Provide narrative for analysis of the program's / discipline's strengths, weaknesses, and opportunities.

Our program's biggest strength is we can produce career-ready students ready to work in a short amount of time depending on the need of the student. Our biggest weakness is lack of space and equipment but we're in the process of correcting that with our new upcoming space (opportunity).

**Review prepared and submitted by:** (Please list name(s) and titles)

Kendall Edwards, HVAC Instructor

#### **Approvals**

- 1. Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review and approve the Program/Service Review when completed by the responsible program/service personnel.
- 2. Using DocuSign (electronic signature), appropriate Division Dean, Director, or AVP is asked to read and approve the Review.
- 3. Using DocuSign (electronic signature), appropriate Vice President/Associate Vice President is asked to read and approve the Review.

IE Acceptance / Date:	Moore	11/28/2022
Dean, Director, or AVP / Date:	Dr. Enrie White	11/28/2022
Administrator Approval / Date:	Dr. Brandon M. Junkins	1/13/2023