

CE Program Advisory Committee Meeting Heating, Ventilation, Air Conditioning and Refrigeration

> March 23, 2023 Virtual Zoom Meeting Convened at 1:30 p.m. Meeting Adjourned at 3:00 p.m. Facilitator: Matthew Denny

COMMITTEE MEMBERS	EX-OFFICIO
Garrett Cook, RSD	Donald Carlson, Dean of Technology, OCC
Victor Garcia, RSD	Matthew Denney,
Jason Martinez, Maintenance Manager	Program Coordinator, OCC
Ecotech Refrigeration & HVAC	Elaine Devlin, CE staff, OCC
Pat Uetz, Sales Manager, ATC Systems	Jacob Riddle, Faculty, OCC
John, Service Manager, Ecotech	Aalayah Thompson, CE Outreach Specialist
Refrigeration and HVAC	Cynthia Voss, Tech Counselor, OCC

ADVISORY COMMITTEE MEETING SUMMARY

1. Welcome & Introductions

- Committee members introduced themselves and confirmed their respective titles and roles at their respective companies.
- Matthew Denny reviewed the role and responsibilities of advisory meetings as follows:
 - Review and access the structure, program-level outcomes and curriculum of the Heating, Ventilation, Air Conditioning and Refrigeration Program;
 - Ratify and recommend changes to program structure, PSLOs and curriculum so that the program and curriculum align to stated occupational outcomes and industry needs and requirements.
 - o Make recommendations for program improvement.

2. Review and Reaffirmation of Existing Certificates and Degrees

- The committee reaffirmed the existing certificates and degrees:
 - Heating, Ventilation, Air Conditioning and Refrigeration, Associate in Science Degree
 - Heating, Ventilation, Air Conditioning and Refrigeration, Certificate of Achievement

3. Program Outcome Data

- The committee reviewed and ratified the Program Level Outcomes (PLOs):
 - Heating, Ventilation, Air Conditioning and Refrigeration: Prepare students for entrylevel employment as an HVACR Technician and for industry certifications.
- Biennial Program Review
 - The committee previously reviewed and discussed the document at last year's meeting.
 - Next review will be in 2023-2024.
- Perkins Program Core Indicators (Attachment)
 - Committee made suggestions for improvements in recruitment, instruction/ retention, or job referral/placement of non-traditional program enrollment (females) in the special populations sub-groups represented.
 - It was suggested by two people on the call to have an alumna that is female give a testimonial by video about the OCC HVACR program, and to put that video on

the OCC HVACR website. Aalayah Thompson in CE can make that video happen. Please contact her with alumna information.

- When marketing the program, use brochures with females in them.
- Talk to Adult Education to see if there is an interest by Adult Education students to participate in the HVACR program.

4. Review and Ratification of Last Advisory Committee Recommendations

- Last Meeting Date: April 21, 2022
- Reviewed and ratified the notes from the last committee meeting. See the attached last meeting summary.
- Reviewed the progress of recommendations:
 - Writing curriculum for 2 new certificates for course that will hopefully start in 2024
 - HVAC and Heating Installation and Service Certificate (15 units)
 - Refrigeration Service Certificate (15 units)
 - Purchased and installed equipment used in the field to do hands-on teaching in program courses. Examples of equipment: a cooler, a fridge, building automation trainers.
 - Doing more hands-on learning on equipment in every course in the program.

5. New Curriculum and/or Program Proposals

- The new certificates proposed at the last meeting are in process:
 - Refrigeration Service Certificate
 - HVAC and Heating Service and Installation Certificate.

6. Work-Based Learning Opportunities

- Overview of existing work-based learning elements of program and gaps or needs
 - Can't do the field trips we used to do before COVID so we purchased equipment and do a lot more hands-on work in all of our courses.
 - Continue to purchase equipment currently used in the industry to enhance the program with hands-on learning tools.
 - See a need to purchase training units that have visual components to train students.
- Advisor recommendations and referrals for new internships or apprenticeship opportunities
 - The industry thinks that it's a great idea to have a professional day where students and employers can meet and talk
 - Maybe do a luncheon to attract contractors to come to the school
 - Just have 2 or 3 employers at a time come out to talk to students since it's hard to get all industry to show up on one date for a professional day
 - Have guest speakers from the industry speak in-person or on zoom to students in courses offered in the HVACR program.

7. Industry Update & Employment Trends

- Emerging technologies and industry developments impacting instructional programs
 - Natural refrigerants
 - New inverted systems
 - VRF (Variant Refrigeration Flow) and VRV Technology
 - Liquid CO2
- *Industry* hiring practices and trends
 - Driving records important need to be able to be insured on cars for jobs
 - Looking for students that know what they are getting into and committed to staying in the field
 - Industry is looking for long term employees since they pay a lot to train someone for 3 years.

8. Summary of Committee Recommendations

- The committee reaffirmed the existing program certificates and degrees:
 - Heating, Ventilation, Air Conditioning and Refrigeration, Associate in Science Degree
 - Heating, Ventilation, Air Conditioning and Refrigeration, Certificate of Achievement
- New or Revised Curriculum/Classes or Program Structure
 - Writing new curriculum and pushing it through the state to be approved. Today, the committee reaffirmed the creation of the following two new certificates:
 - HVAC and Heating Installation and Service Certificate
 - Refrigeration Service Certificate
 - The committee strongly recommends the hire of an instructional associate.
- New Equipment/Technology
 - The committee recommends the purchasing of 2 hands-on training units to be used in HVACR program courses.
 - iConnect has hands on training systems
 - The iConnect trainers are built by the same company that built the automation trainers. We would like to get a complete Conventional Air Conditioning and a Heat pump system. These training systems could be used for the air balance and service classes. They come complete with monitors to show the class live information as the system is working. We have built multiple systems that the students work on, but these would be helpful during the lectures to show what would happen as we are speaking about the subject and also for testing purposes.
 - The committee highly recommends the hire of an instructional associate.
- Other recommendations for program improvement

9. Closing Remarks

Matthew Denny would like to thank everyone for attending the meeting, taking time out of their schedules to support this great cause. He reiterated that the program would be nothing without the employers.