

SAN DIEGO COMMUNITY COLLEGE DISTRICT
Air Conditioning, Refrigeration, Environmental Control Technology Advisory Committee
October 12, 2018

PRESENT

Martin Naranjo – Service Manager – A.O. Reed
Randy Signore - Vice President Service Operations – Countywide Mechanical Systems, Inc.
Scott Roscoe – Service Manager – Countywide Mechanical Systems, Inc.
Lauren Ramos – Program Support Technician – Military Education San Diego City College
Susan Davison – Chair – Healthy Home Environment Association
Steve Nixon – Jack-of-All-Trades - National Air and Energy
Angela Testado – Curriculum Staff – San Diego City College
Jennifer Boots – Curriculum Chair – San Diego City College
Fred Julian – Department Chair Engineering and Technologies - San Diego City College
Justin Bond – Assistant Professor – Air Conditioning, Refrigeration, and Environmental Control Technology
Lynne Mitschke - Sustainability Consultant - City of Chula Vista, Development Services Department
Tim Lowe - Service Manager -Action Air Conditioning Heating & Solar
Linda Pierce - Executive Director - California Association of Building Energy Consultants
Randy Barnes – Acting Dean – Engineering & Mathematics, Sciences, and Nursing
Cassie Morton – Apprenticeship Counselor – San Diego City College

Please see sign in sheet attached

CALL TO ORDER

Meeting was called to order by Justin Bond at 1:03 p.m.

APPROVAL OF MINUTES

Not applicable. This was the first meeting held by new faculty member and lead instructor, Justin Bond.

AGENDA ITEMS

Justin Bond explained the reason for the committee meeting and the charge of the committee. The primary consideration for this meeting is to review curriculum changes that are in process and to review Labor Market Data.

Planned Deactivations

Bond informed the committee that he is in the process of deactivating certificates in order to update according to market needs. Part of the reason for the deactivations was to move Solar out of the existing awards. The committee agreed that this separation and a new program designator were needed.

Proposed Deactivations

Award Title	Award Type	Units
Air Conditioning and Solar Energy	Certificate of Performance	16

Heating, Air Conditioning and Solar Energy	Certificate of Achievement	31
Stationary Facilities Engineering and General Maintenance Technician	Certificate of Achievement	32

Program Revisions and New Programs

Bond shared the planned revisions and new options in the degree and certificate programs. These are designed as “stackable” certificates so students can complete the initial program- a Certificate of Achievement or Associate in Science degree in the field of HVAC/R Mechanical Systems Installation and Repair and become employed as a system installer. Two additional courses lead to the Certificate of Achievement and Associate Degree in Mechanical Systems and Solid-State Electronics Technician. These changes were modeled after the California Career Technical Education Model Curriculum Standards in the area of Mechanical Systems Installation and Repair Pathway.

In addition, a certificate and degree option for Mechanical Systems Project Development was presented. These programs include courses that will remain in the curriculum as they are in use by several apprenticeship programs at City College. The committee agreed on these revisions and new programs, adding that customer service skills would be particularly useful for both degrees. Justin added that future program changes might include adding a Business Customer Service course (BUSE 102).

Bond reviewed course revisions. The AIRE 060 course is designed to prepare students to pass the OSHA 30 hour certification. Employers present at the meeting agreed that this would be extremely useful in preparing new employees as safety is extremely important. The AIRE 090 course is designed to prepare students for the Indoor Air Quality and Mold Remediation certification. It was noted that these could be offered as online courses.

AIRE 104 prepares students for a variety of certifications essential for work in the HVAC field, including Environmental Protection Agency (EPA) certification. The committee noted that this is in line with State of California requirements. Upon completion of the course, the EPA universal exam is offered to students at a discounted rate.

The committee agreed that these courses are appropriate for the program and would provide the needed certifications for employment. A vote was taken on the curriculum changes, and passed unanimously.

Approved New Curriculum

Award Title	Award Type	Units
Advanced HVAC/R Mechanical Systems Installation and Repair	Certificate of Achievement	24
Basic HVAC/R Mechanical Systems Installation	Certificate of Achievement	19
HVAC/R Mechanical Systems Installation and Repair	Associate of Science	24 + Gen Ed req.
Mechanical Systems and Solid-State Electronics Technician	Associate of Science	30 + Gen Ed req.
Mechanical Systems and Solid-State Electronics Technician	Certificate of Achievement	30
Mechanical Systems Project Development	Associate of Science	33 + Gen Ed req.
Mechanical Systems Project Development	Certificate of Achievement	33

Industry Feedback

Committee members discussed other useful certifications for residential and commercial applications. Recommendations included HERS certification, Acceptance Testing, Title 24 certification, and BPI certification. These could be offered subsequent to the OSHA, Indoor Air Quality, and EPA certifications. There was also discussion about requiring the proposed Building Science course from the upcoming EGEE program as part of the AIRE Mechanical Systems Project Development program.

Representatives from the San Diego Community College District Military Education Program were in attendance, and inquired whether the revised and new programs could be considered for ACE credit certification. Bond suggested that ACE credit be used to satisfy some of the program requirements, and that the SMART transcript could be used to verify military education experience.

The committee reviewed labor market information that was shared with the group. All employers were in agreement that there is strong demand for skilled workers in the trade, and that anticipated separations and retirements of as much as 50% of the current workforce would provide ongoing demand for installers and technicians.

In terms of new equipment needed for the program, Bond shared the need for electronic training systems that are in use by other colleges. He noted that this equipment could be shared with the electronics program. Estimated cost for 10 Nida Trainers, the training system he proposes to use is \$104,000, and the committee supported this expenditure pending funding availability.

ADJOURNMENT

After a tour of the newly remodeled training facility, Bond adjourned the meeting at 2:30 p.m.