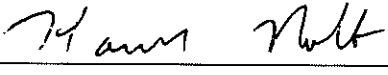


New Program Request Form

CA1

General Information

Institution submitting proposal	Dodge City Community Technical College
Name, title, phone, and email of person submitting the application <i>(contact person for the approval process)</i>	Dr. Clayton Tatro, VP – Workforce Development ctatro@dc3.edu 620-224-9856
Identify the person responsible for oversight of the proposed program	Dr. Clayton Tatro
Title of proposed program	Climate and Energy Control Technologies (HVAC)
Proposed suggested Classification of Instructional Program (CIP) Code	47.0201
CIP code description	A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing and using air conditioning, refrigeration, ventilation, and heating systems. Includes instruction in principles of heating and cooling technology, design and operational testing, inspection and maintenance procedures, installation and operation procedures, and report preparation.
Standard Occupation Code (SOC) associated to the proposed program	49-9021.00
SOC description	Install or repair heating, central air conditioning, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.
Number of credits for the degree <u>and</u> all certificates requested	44 credit hours – Certificate 60 credit hours – AAS Degree
Proposed Date of Initiation	Fall 2020
Specialty program accrediting agency	None
Industry certification	ICE -- NATE Building Automation Systems – NC3

Signature of College Official  Date 04/17/20

Signature of KBOR Official _____ Date _____

Narrative

Program Description

- **Provide a complete catalog description (including program objectives) for the proposed program.**

The Climate and Energy Control Technology program presents technical training to students in the areas of electricity, heating, residential air conditioning, refrigeration, sheet metal fabrication, direct digital controls (DDC) & commercial HVAC applications. This program provides students with industry credentialing in the areas of refrigerant handling safety, tool usage and control fundamentals. Foundational skills and principles learned in this program prepare students to work in the commercial and residential HVAC market place.

- **List and describe the admission and graduation requirements for the proposed program.**

Admissions Policies

A person can be admitted to Dodge City Community College in one of the following ways:

- A graduate of an accredited high school.
- A successful completer of the General Education Development (GED) examination.
- A person 18 years of age or older.
- A graduate of an approved home-school program or a nonaccredited private school. Students must submit evidence of their academic status in the form of a diploma, transcript or assessment exams.
- A high school sophomore, junior or senior student with written permission from the high school principal.
- A student enrolled in grades 9 through 12 in a recognized gifted program with written permission from the high school principal.
- A transfer student, in good standing, from a regionally accredited university/college. The college reserves the right to deny admission or re-admission to any individual determined by the Vice President of Student Affairs to be a threat to the community college.

Graduation Requirements

Students must earn a minimum 2.00 grade point average and complete at least 12 credit hours of their last 24 credit hours in residence in order to graduate from Dodge City Community College. A minimum grade of "C" is required in English Composition I (ENG 102), English Composition II (ENG 103), and Public Speaking (SP 106) to be counted toward graduation. Please refer to the Degree Requirements section of this catalog for specific degree, certificate, or program requirements. Students will follow the guidelines of the catalog in effect when they first enrolled, provided they remain continuously enrolled from the semester of entry to the semester of graduation. Students who are not continuously enrolled at Dodge City Community College from the date of entry to the date of graduation will follow the guidelines of the current catalog in effect when they returned. Degrees will be conferred in August, December and May.

Demand for the Program

- **Using the Kansas Department of Labor’s Long Term Occupational Outlook, (<https://klic.dol.ks.gov>) identify employment trends and projections: occupational growth, occupational replacement rates, estimated annual median wages, and typical education level needed for entry.**

Included.

- **Show demand from the local community. Provide letters of support from at least three potential employers, which state the specific type of support they will provide to the proposed program.**

Included.

- **Describe/explain any business/industry partnerships specific to the proposed program.**

None.

Duplication of Existing Programs

- **Identify similar programs in the state based on CIP code, title, and/or content. For each similar program provide the most recent K-TIP data: name of institution, program title, number of declared majors, number of program graduates, number of graduates exiting the system and employed, and annual median wage for graduates existing the system and employed.**

Salina Area Technical College
Highland Community College
Johnson County Community College
Fort Scott Community College

Seward County Community College
Neosho County Community College
Washburn Tech

- **Was collaboration with similar programs pursued:**
 - **Please explain the collaboration attempt or rationale for why collaboration was not a viable option.**

Given the geographic distance from Wichita and Topeka, and due to the regional needs of employers, no collaboration between programs was pursued.

This is not program duplication. Both a regional and state-wide need exists for new employees in as many locations as possible.

Program Information

- **List by prefix, number, title, and description all courses (including prerequisites) to be required or elective in the proposed program.**

Workplace Skills (1 credit) Upon successful completion of this course, the student should be able to identify the job skills necessary to have a successful career in the field of their choice. Topics included listening skills, oral communication, human relations, decision making/problem solving, how to work as a team, time and resource management, work ethics, career planning and resume building.

Safety Orientation/OSHA (1 credit) Safety Orientation/OSHA 10 provides the student with an overview of the OSHA standards relevant to the construction industry. Various topics are presented in a 15-hour format. Among the subjects covered in the course are: an introduction to OSHA, electrical safety, fall protection, and excavation and trenching safety.

Electrical Fundamentals (4 credits) The student will receive instruction in basic electrical theory for DC and Alternating Current systems. The student will have knowledge on the production of electricity and how to apply Ohm's Law and Power Formula. Electrical safety is taught along with skills in how to read and interpret schematic diagrams.

Electrical Fundamentals II (1 credits) Students will be introduced to motor theory and explore motor applications. This course builds on previous knowledge gained in Electrical Fundamentals I and requires a firm understanding of magnetism and voltage production. Motor trouble shooting will be introduced. Types of motors covered will be single phase motors, three phase and ECM motors.

Heating System Fundamentals (3 credits) This course will give students a firm understanding of combustion and how it is applied in the HVAC trade. Residential gas furnaces will be studied in detail in order to gain understanding in how they are installed and serviced. A thorough understanding of Standard, Midrange and High Efficiency furnace service and installation will be earned as a result of this course.

Heating System Fundamentals II (2 credits) The heating System Fundamentals II course is designed to walk student through the requirements of the Uniform Mechanical Code in relation to Gas Piping and exhaust ventilation. Student will gain a thorough understanding and be able to apply skills in sizing vents and pipe upon completion of this course.

Advanced Electrical Theory for HVAC (2 credits) Advanced Electrical Theory for HVAC is a continuation of Electrical Fundamentals and places an emphasis on developing systematic diagnosis and troubleshooting methods and procedures that will enable the student to become a highly-skilled, professional HVAC-R service technician.

Advanced Heating Systems (3 credits) This course will introduce students to electric furnaces and hydronic heating with an emphasis on the electrical systems of those units and code requirements for the safe installation of such equipment. Indoor air quality will be discussed in detail as a major factor in human comfort.

Sheet Metal Fabrication I (3 credits) This course focuses on sheet metal fabrication utilizing various sheet metal tools and techniques. Duct sizing is discussed in addition to code requirements for duct systems.

Energy Loads and Calculations (4 credits) The course will teach students to analyze heat flow characteristics as they study heat loss and heat gain factors as it pertains to residential HVAC design. Topics will include the effects of selected materials and the layout of the system for the purpose of trouble shooting, load estimation and duct sizing.

HVAC Fundamentals (4 credits) This course is designed to introduce students to the broader picture that is HVAC. Students will become familiar with trade related organizations, job requirements, gain skills in soldering and brazing, and demonstrate learned skills to service and repair air conditioning systems.

EPA 608 (1 credits) Students will be certified in federal regulations of safe refrigerant handling practices. Successful completion of the certification course is required for technicians to work with and purchase refrigerants.

Intro to Mechanical Refrigeration (4 credits) The students will apply knowledge previously learned in HVAC Fundamentals to ice machines, refrigerators and commercial coolers. Students will learn the function of the specialized electrical circuits and how to service and repair these systems.

Heat Pumps (3 credits) The student will learn the basic functions of various Heat Pump design as well as charging and troubleshooting procedures.

Commercial HVAC (4 credits) This course will introduce students to the commercial applications of various HVAC systems. A strong foundation in refrigeration theory is required as well as a comprehensive understanding of system airflow and electrical fundamentals. Students who complete this course will be skilled in reading advanced electrical schematics and be able to describe the function and application of various commercial systems and components including Direct Digital Control systems and frequency drives. This is a capstone course.

Commercial HVAC Lab (4 credits) This course continues the introduction to Commercial HVAC systems through hands-on training. Students will be performing basic maintenance, repairs and troubleshooting on functioning light commercial and commercial equipment.

- **If the proposed program includes multiple curricula (e.g., pathways, tracks, concentrations, emphases, options, specializations, etc.), identify courses unique to each alternative.**

Not applicable.

- **Provide a Program of Study/Degree Plan for the proposed program including a semester-by-semester outline that delineates required and elective courses.**

Program Title:	Climate and Energy Control Technologies
Degree/Certificate Type:	AAS/Certificate

First Semester

Course #	Course Title	Hours
	HVAC Fundamentals	4
	Workplace Skills	1
	Safety Orientation/OSHA 10	1
	Electrical Fundamentals	4
	Electrical Fundamentals II	1
	Total	11

Second Semester

Course #	Course Title	Hours
	Heating System Fundamentals	3
	Advanced Electrical Theory for HVAC	2
	Advanced Heating Systems	3
	Sheet Metal Fabrication I	3
	Total	11

Third Semester

Course #	Course Title	Hours
	Energy Loads and Calculations	4
	Heating System Fundamentals II	2
	EPA 608	1
	Intro to Mechanical Refrigeration	4
	Total	11

Fourth Semester

Course #	Course Title	Hours
	Heat Pumps	3
	Commercial HVAC	4
	Commercial HVAC Lab	4
	Total	11

Course	Credits
ENG 101 Technical Communications OR ENG 102 English Comp I	3
SP 106 Public Speaking OR SP 206 Interpersonal Communication	3
BUS 143 Intro to Business OR ECON 101 Principles of Macroeconomics OR ECON 102 Principles of Microeconomics	3
Computer Science Basic Skills Elective	3
MATH 089 Basic Applied Math (or above)	3
Physical Education Elective	1
Total	16

- **List any pertinent program accreditation available:**

Not applicable.

- **Provide a rationale for seeking or not seek said accreditation**

Student completion of industry-recognized credentials will be a program focus in lieu of accreditation:

Industry Competency Exams administered by NATE (North American Technician Excellence)

Building Automation Systems – NC3 (National Coalition of Certification Centers)

Faculty

- **Describe faculty qualifications and/or certifications required to teach in the proposed program.**

DCCC Board of Trustees policy on Faculty Qualifications reads as follows:

“Faculty teaching in a career and technical education college-level certificate and occupational associate’s degree programs should hold a bachelor’s degree in the field and/or combination of education, training and tested experience.”

Required Qualifications

- High School Graduate or GED completed.
- Bachelor’s Degree or applicable college-level course work and appropriate training/experience. Experience to include a minimum of 4,000 contact hours of work experience as an HVAC Technician. Military experience strongly considered.
- Extensive knowledge of Climate and Energy Control Technology (HVAC) systems and equipment including equipment maintenance, installation, quality control, and operation monitoring.
- Valid industry-recognized credentials in Climate and Energy Control Technology -- HVAC (i.e. ICE, Building Automation Systems, etc.)
- Teaching and/or training experience.
- Ability to demonstrate excellent oral and written communication skills.
- Ability to work with groups, organizations, and institution.
- Computer skills and ability to use technology in the classroom.
- Must obtain and maintain a valid Kansas driver’s license.

Preferred Qualifications

- Master’s degree in Technical Education.
- Community College or College/University teaching experience.
- Qualifications/credentials in an additional program content area.

Cost and Funding for Proposed Program

- **Provide a detailed budget narrative that describes all costs associated with the proposed program (physical facilities, equipment, faculty, instructional materials, accreditation, etc.).**
- Provide detail on **CA-1a form**.

CA-1a included.

Budget Narrative

Student Headcount

Student headcount is appropriately conservative for a new program.

Personnel

The proposed Climate and Energy Control Technologies program will be initially staffed with a 1.0 FTE full-time instructor. The part-time adjunct instructor line is included to account for the need for substitute instructors in case of instructor absence as well as evening and summer possibilities.

Initial Budget

The \$214,000 allotted for initial equipment will outfit a nicely-appointed lab with \$24,000 for tools being a reasonable start-up amount. Included in the tool costs will be bread-board style trainers. Estimates were secured from Trane Ingersoll-Rand as a possible vendor. The potential exists for some start-up equipment and supplies to be shared between the newly-proposed Electrical Technology program.

\$95,000 allotted for facility modifications revolve around the need for design/layout/millwork on both the commercial side and residential side of the lab.

Technology/software is available through Trane Ingersoll Rand.

Furnishings will include tables/chairs and storage.

Ongoing Costs

The proposed Electrical Technology can continue with a second 1.0 FTE full-time instructor for second-year students. The part-time adjunct instructor line is included to account for the need for substitute instructors in case of instructor absence as well as evening and summer possibilities.

24,000 for tools being a reasonable addition in Year 2. Included in the additional tool costs will be additional bread-board style trainers.

Furnishings in Year 2 will include additional storage.

Additional Narrative Comments

Dodge City Community College has been conspicuously neutral in its approach to Technical Education in the last few years. Few Tech Ed programs were offered and little activity surrounded Excel in CTE courses/programs.

This approach changed in Fall 2020. The vacant position of Dean for Workforce Development was modified, the vacancy was posted, and the position was filled as the Vice President for Workforce Development; the position now reports directly to the President.

DCCC has repositioned, repurposed, and re-aligned Technical Education in the last few years to allow for a resurgence. Multiple technical programs, including Automotive Technology, Computer Science, Fire Science, EMT, and Electrical Power Technology have been put on pause or partnerships have been initiated with other colleges to re-position the College's Tech Ed resources to make budget room for new programs.

Annual budget savings exhibited in the General Fund, capital outlay budgets, and reserves will be utilized to initiate these programs. Southwest Kansas is literally crying for additional technicians/skilled trades positions. Enrollments should/will sustain the program.

- **Describe any grants or outside funding sources that will be used for the initial start-up of the new program and to sustain the proposed program.**

U.S. Department of Education D-HSI Title V Grant submitted in February 2020. Successful grant award would purchase the Trane Ingersoll-Rand equipment.

While no timetable is available for the anticipated announcement, general funds and reserve funds will be to purchase equipment if the grant application is not successful.

Program Review and Assessment

- Describe the institution's program review cycle.

Assessment and evaluation of the Climate and Energy Control Technology program will follow the same schedule as outlined for other programs for program evaluation and student assessment, including program review, development of the assessment plan, reporting of program student learning outcomes, and competency profiles.

Program Reviews

Responsibilities

Vice President of Academic Affairs/CAO & Vice President for Workforce Development: It is the responsibility of the Vice President of Academic Affairs and the Vice President for Workforce Development to establish and maintain the program review schedule. It is the responsibility of the Vice Presidents to provide Board meeting dates to those whose programs have been reviewed and to inform them, as well as the Curriculum Committee, of Board decisions concerning program reviews. It is the responsibility of the Vice President of Academic Affairs/CAO or his/her designee to report on the status of program reviews to the Board of Trustees, and to the President of the College.

Division Chairs: It is the responsibility of the Division Chairs to complete the program review forms and to make presentations to the Curriculum Committee and/or to distribute program review forms and/or delegate to the appropriate individual within the division/department/program the responsibility for presenting program reviews to the Curriculum Committee.

Curriculum Committee Chair: It is the responsibility of the chair to distribute program review materials to committee members and to oversee the providing of recommendations to the Vice President of Academic Affairs/CAO and Vice President for Workforce Development.

Curriculum Committee: It is the responsibility of the Curriculum Committee to hear program review presentations and to provide recommendations concerning reviewed programs to the Vice President of Academic Affairs/CAO and Vice President for Workforce Development.

Program Approval at the Institution Level

- Provide copies of the minutes at which the new program was approved from the following groups:
 - Program Advisory Committee

Minutes included from newly-formed Program Advisory Committee meeting on April 16, 2020.

- Curriculum Committee

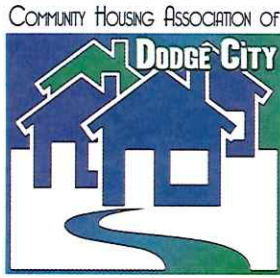
Minutes included from Curriculum Committee meeting on March 31, 2020.

- Governing Board

Action reports from the April 29, 2020, DCCC Board of Trustees meeting will follow promptly.

Submit the completed application and supporting documents to the following:

Director of Workforce Development
Kansas Board of Regents
1000 SW Jackson St., Suite 520
Topeka, Kansas 66612-1368



Community Housing Association of DODGE CITY



Clayton Tatro, Ph.D.
Dodge City Community College
2501 N 14th Avenue
Dodge City, KS 67801

April 14, 2020

Dear Dr. Tatro

The Community Housing Association of Dodge City (CHAD) is in support of HVAC, electrical and plumbing certificate programs. Dodge City is currently facing a shortage of affordable housing. This is partially due to the labor shortage in the construction industry. CHAD has experienced this firsthand, having difficulty acquiring licensed contractors in HVAC, electrical and plumbing to complete our new builds and renovations.

CHAD is a 501 (c) (3) non-profit organization established to facilitate all levels of housing for our community. We have a strong partnership with the Building Construction Technology Program at Dodge City Community College. We provide the materials and equipment for the students to build a house, allowing them hand's-on construction experience. CHAD also provides scholarships and code books for the students.

The City of Dodge City is another partner to the Building Construction Technology Program. The Director of Development Services provides internships and serves on the advisory committee as well as helps coordinate guest speakers and job shadowing. The Director of Development Services supervisors all construction and teaches code compliance.

CHAD and the City of Dodge City look forward to forming the same partnerships with HVAC, electrical and plumbing programs.

Sincerely,

A handwritten signature in black ink, appearing to read "Mollea Wainscott".

Mollea Wainscott
Housing Coordinator
CHAD

A handwritten signature in black ink, appearing to read "Kevin Israel".

Kevin Israel
Director of Development Services
City of Dodge City

Community Housing Association of Dodge City, Inc. (CHAD)

311 W. Spruce • P.O. Box 818 • Dodge City, KS 67801 • (620) 227-9501



100 Military Plaza, Ste. 222
Dodge City KS 67801

620.371.8100
www.pruittservices.net

Dear Dr. Clayton Tatro,

I am writing you today regards to the proposed Electrical and HVAC. I have many concerns about the growth of any trade in this region with primary focus on Electrical, HVAC and Plumbing. It is crucial in this time that we target our youth to create massive change towards the service industry. We can correct the "industry standard" and teach not only a skill set to provide quality but also a mind set to serve. Our community is overrun with "tradespeople" that have no proper training or protection for their client and the numbers or growing daily. The reality it the "industry standard" is hire the cheapest contractor we can get, no matter the level of training. This is our opportunity to build a group of **Service Experts** that can change all of that for the future. We can serve them at the highest level and teach a culture of community to stay here in this area and serve!

I wish your and your team the best, and we are here to serve if needed.

Have a better than great day.

Jeremy Pruitt



April 16th, 2020

Support Letter

Mr. Clayton Tatro,

We here at Christian Brothers Construction would like to strongly encourage you to consider adding MEP certifications to the Dodge City Community College Building Trades Program. It has been our experience that when our projects get to the MEP trades the project bottlenecks and stalls at these scopes of work. We consistently see these contractors overbooked and spread too thin. This creates problems in satisfying scheduling benchmarks, client owner relations and ultimately our bottom line. It is our opinion that a larger skilled and certified market pool would greatly aide our local construction environment.

In support we would be willing to aid the college financially to pursue this opportunity. I would be willing and honored to sit on an advisory board if so needed. And we would also be willing to be involved in site demonstrations and would entertain supporting this matter in other creative ways.

Again, we hope you consider these points as you make your decision as we believe our perspective on the local market demand is universally felt.

A handwritten signature in black ink, appearing to read "Zac Carlton", written in a cursive style.

Zac Carlton

President



- ✓ *Quality People*
 - ✓ *Quality Construction*
 - ✓ *Quality Relationships*
-
-

April 14, 2020

Clayton Tatro, Ph.D.
Dodge City Community College
2501 N 14th Avenue
Dodge City, KS 67801

Dear Dr. Tatro

Conant Construction LLC supports the implementation of HVAC, electrical and plumbing certificate programs. Conant Construction has had trouble acquiring licensed contractors in HVAC, electrical and plumbing to complete our new builds and renovations.

Conant Construction is a Design-Build/General Contracting firm. While we have carpenters in house, we require a substantial subcontractor base to complete our current volume of work. We anticipate opportunities to grow which will increase the need for both carpenters and MEP licensed subcontractors.

We have a strong partnership with the Building Construction Technology Program at Dodge City Community College. We believe in their program and have hired several of their students. We look forward to continued partnership opportunities.

Sincerely,

Quentin Conant
President
Conant Construction LLC
Dodge City, KS 67801

Dodge City Ford County



DEVELOPMENT CORPORATION

101 E. Wyatt Earp Blvd. • P.O. Box 818 • Dodge City, KS 67801-0818 • (620) 227-9501 • FAX (620) 227-2957 • 1-800-381-3690
www.dodgedev.org • email: jknight@dodgedev.org

April 15, 2020

Dr. Clayton Tatro
Dodge City Community College
2501 N 14th Avenue
Dodge City, KS 67801

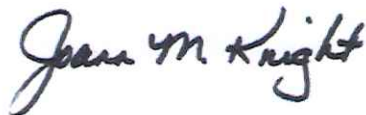
Dear Dr. Tatro,

The Dodge City/Ford County Development Corporation is pleased to support Dodge City Community College's application for the grant to implement HVAC, electrical and plumbing programs into our student class offerings. We feel these programs are greatly needed in our community at this time. Not only will they increase our skilled workforce, they will offer opportunities for internships and job shadowing. They will also allow for opportunities for guest speakers, an advisory committee and material/equipment donations.

Workforce training in all of these areas is critical to the economic success for Ford County. We are currently experiencing tremendous growth across the workforce sectors combined with a very low unemployment rate. It is crucial that we train local students and recruit individuals to be trained in these areas. We would greatly appreciate your support and approval of this application. Having skilled, qualified workers is an important part of the long-term success created in our community.

Your support of this application will be extremely beneficial to the success of our entire region.

Sincerely,



Joann Knight
Executive Director



P.O. Box 997
1200 13th Ave
Dodge City KS, 67801
Phone #: 620-227-6683
Toll Free #: 866-354-6683
Fax #: 620-227-6689

April 15, 2020

Pat Shiew

RE:
DCCC. Construction Technology Program.
Clayton Tatro VP. Workforce DCCC.

I want to provide my support of the existing programs you have and the addition of the HVAC, Electrical and Plumbing.

As a former Dodge City High school Building Trades student, and being in construction for over 45 years, I have found it harder and harder, to find people interested in the building trades.

I feel this is due to the fact that for many years, the students were being led to believe everyone needed a college degree in some sort of business class, and working with their hands was beneath them, so we have had very little exposure for the students, to see the different types of trades, and the understanding of the wages a good trades person can achieve.

Being in a rural area as we are, there are a lot of students graduating that do have good work ethics, and with exposure to available trade programs I feel you could build a very strong Technology program.

I have worked with Pat Shew, his program, and advisory board for several years, and I feel he has accomplished a very good rapport with students and contractors.

He is very good, and knowledgeable Instructor.

But, I feel he has had a very hard task put on him, with the class work, and field instruction, and not getting assistance in the recruiting of students.

With this I hope to see the continued support I feel he will be receiving from you and possibly additional programs and instructors.

Thank you


Leon Lee
L R Lee Contracting

Climate and Energy Control Technologies (HVAC) Employment Statistics -- 2016 -2026

<https://klic.dol.ks.gov>

Occupational Title	Employment		Change in Employment		
	Base Year 2016	Projected Year 2026	Numerical	Percent	Percent Annual
HVAC Technicians	2,411	2,656	245	10.2%	1.0%

Exits	Openings due to:					Total	
	Exits: Annual	Transfers	Transfers: Annual	Numerical Change	Numerical Change: Annual	Openings	Openings: Annual
700	70	1,699	170	245	24	2,644	264

Wages		
Annual Entry Level Wage	Annual Median Wage	Annual Experienced Wage
\$33,022	\$46,596	\$56,129

Program Name	Total # Declared Majors	Total Concentrators	Total # Pursuing Additional Education	Total # Graduates	Total # Graduates Exited	Total # Graduates Exited and Employed	Average Wage: Graduates Exited and Employed	Median Wage: Graduates Exited and Employed
Salina Area Technical College								
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	20	13	^	10	9	8	\$42,360	\$33,561
Highland Community College								
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	23	22	8	13	9	9	\$39,466	\$28,420
Johnson County Community College								
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	133	78	54	30	24	23	\$43,951	\$391,218
Fort Scott Community College								
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	12	9	^	6	^	^	^	^
Seward County Community College								
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	16	10	13	^	^	^	N/R	N/R
Neosho County Community College								
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	46	41	31	16	7	5	^	^
Washburn Institute of Technology								
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	46	28	9	17	15	15	\$35,586	\$33,280

Program Advisory Committee
Climate and Energy Controls Technologies
April 16, 2020

Members: Kevin Israel, City of Dodge City
Leon Lee, L.R. Lee Contracting
Mollae Wainscott, Community Housing Association of Dodge City
Quentin Conant, Conant Construction, LLC
Andy Fahrmeier, Hutton Construction
Jeremy Pruitt, Pruitt Electric
Zac Carlton, Christian Brothers Construction
Patrick Shiew, DCCC Building Technology Faculty
Clayton Tatro, DCCC VP – Workforce Development

Present: Kevin Israel, City of Dodge City
Leon Lee, L.R. Lee Contracting
Mollae Wainscott, Community Housing Association of Dodge City
Quentin Conant, Conant Construction, LLC
Patrick Shiew, DCCC Building Technology Faculty
Clayton Tatro, DCCC VP – Workforce Development

New Business:

Members reviewed and endorsed the following program objectives:

- Apply knowledge of electrical fundamentals.
- Apply knowledge of Mechanical Code.
- Apply knowledge of HVAC theory.
- Demonstrate proper tool use.
- Demonstrate industry expectations for safety and professionalism.
- Apply knowledge of control theory.

Members reviewed and endorsed the following Program Grad Plan:

Program Title:	Climate and Energy Control Technologies
Degree/Certificate Type:	AAS/Certificate

First Semester

Course #	Course Title	Hours
	HVAC Fundamentals	4
	Workplace Skills	1
	Safety Orientation/OSHA 10	1
	Electrical Fundamentals	4
	Electrical Fundamentals II	1
	Total	11

Second Semester

Course #	Course Title	Hours
	Heating System Fundamentals	3
	Advanced Electrical Theory for HVAC	2
	Advanced Heating Systems	3
	Sheet Metal Fabrication I	3
	Total	11

Third Semester

Course #	Course Title	Hours
	Energy Loads and Calculations	4
	Heating System Fundamentals II	2
	EPA 608	1
	Intro to Mechanical Refrigeration	4
	Total	11

Fourth Semester

Course #	Course Title	Hours
	Heat Pumps	3
	Commercial HVAC	4
	Commercial HVAC Lab	4
	Total	11

Course	Credits
ENG 101 Technical Communications OR ENG 102 English Comp I	3
SP 106 Public Speaking OR SP 206 Interpersonal Communication	3
BUS 143 Intro to Business OR ECON 101 Principles of Macroeconomics OR ECON 102 Principles of Microeconomics	3
Computer Science Basic Skills Elective	3
MATH 089 Basic Applied Math (or above)	3
Physical Education Elective	1

Questions were asked among the members as to the way that students would progress through the program: full-time vs. part-time, high school vs. post-secondary.

Strong consensus was voiced among the members for an additional plumbing program beyond the HVAC program.

Action:

Motion made by Leon Lee and seconded by Kevin Israel to approve the program as presented. Motion passed unanimously.

Members recommended that additional members be added to the Advisory Committee. Nominations to be sent to Patrick Shiew and/or Clayton Tatro

With no further business, meeting was adjourned.

Dodge City Community College Curriculum Committee Minutes

Special Meeting
March 31, 2020

Call to Order

By: Rodney Clayton, Chair

Time: 3:00 p.m. Location: Zoom Meeting

Member Attendance

P Rodney Clayton	A Susan Gibbs	P Art Richmond
P Sherry Curtis	P Devlin Goldworm	P Scott Searcy
A Doris Donovan	A Mechele Hailey	P Clayton Tatro
A DeWayne Donaldson	P Jane Holwerda	A Bev Temaats
P Charlene Figger	A Dave McCollum	

Guests

New Business

Course/Program Proposal: Electrical Technology

Course proposal request forms and syllabi for all courses were submitted by Dr. Tatro to the Committee on the shared Google Drive.

Dr. Tatro indicated that the scheduling of this meeting in relationship to the April Board of Trustees meeting in April will allow this course to start in Fall 2020 if approved.

This course would be a certificate program, 30 credit hours in length, morning session and afternoon session. Contact time would be such that there would be 30 credit hours for two semesters, Fall start only. He is not aware if there is a path that would lead to an Associates Degree at this time. Rodney Clayton inquired as to the electrician growth shown in the course proposal, and what area this encompasses. Dr. Tatro indicated these figures were statewide using CLIK data. Charlene Figger inquired if the Craft Skills course would be the same course currently in the construction program. Dr. Tatro indicated it was. The OSHA 30 course could also be reactivated, as it was used in the past. If we were unable to find an OSHA 30 certified instructor, there is an option to use an online course. The other seven courses listed in the proposal would be new courses.

Motion: Sherry Curtis moved to approve the program; Art Richmond seconded the motion. All approved.

Outcome: Motion carried.

Course/Program Proposal: Climate and Energy Control

Course proposal request forms and syllabi for all courses were submitted by Dr. Tatro to the Committee on the shared Google Drive.

Dr. Tatro indicated reported that the scheduling of this meeting in relationship to the April Board of Trustees meeting in April will allow this course to start in Fall 2020 if approved.

Dr. Tatro explained that this program could be an AAS as well as certificate B program. The certificate program would have to be less than 45 credit hours, so the program is submitted as 44 credit hours. Charlene Figger asked about what courses would make up the 18 hours to fulfill the AAS requirements. Dr. Tatro requested that if a motion was made, they could stipulate that the remaining degree requirements would be submitted by Dr. Tatro, Dr. Holwerda, and Charlene Figger. Rodney Clayton asked about the lease arrangements at Waters True Value. Dr. Tatro indicated that he's 98% sure that the nursing program would go into the Learning Center building. Dr. Tatro has also discussed options at Gibson's Industrial Park with Gary Chaffin. If the program were to locate at the former Bogaart's location (adjacent to the Learning Center) the property would be ready by June 1, the Learning Center space would be ready by July 1, however, the location at Gibson's would be available today.

Motion: Sherry Curtis moved to approve the program with the AAS degree program requirements worked out between Dr. Tatro, Dr. Holwerda, and Charlene Figger. Devil Goldworm seconded the motion. All approved.

Outcome: Motion carried.

Rodney Clayton asked the Committee if they felt their students had been able to access their online courses successfully. Sherry Curtis indicated that only one student had expressed concerns with having limited access to a computer rather than using their phone. Devlin Goldworm agreed; most students were using their phones but he will be giving his first test next week, so he was interested to see how that went. Dr. Holwerda discussed the financial aid opportunities that existed for qualified students to obtain computers. Rodney Clayton indicated he has had several students report that they had been laid off, and could not afford internet services. Dr. Tatro mentioned the DC3 Wi-Fi that is available to students in front of the Cosmetology building, as as various locations in surrounding communities. Dr. Holwerda discussed the option of giving incomplete grades, or as Dr. Tatro mentioned, perhaps an administrative withdrawal. There will be discussions moving forward regarding how things would be handled if courses were withdrawn due to the Covid19 virus. Rodney Clayton inquired as to the laptops that were ordered, and if we were going to have them available to students to use. Mike Webster is overseeing the process and maintaining a list of where the laptops have been loaned out. Dr. Holwerda reported that the State is asking institutions to keep track of expenses incurred during the Covid19 virus period.

Adjournment

Motion made by Scott Searcy to adjourn the meeting at 4:05 p.m.; seconded by Sherry Curtis. All approved.

Respectfully submitted,
Jenny Hutton, Curriculum Committee Secretary

DC3 Summary for Proposed Program

Proposed Program: _Climate and Energy
Control Technologies

IMPLEMENTATION COSTS

Part I. Anticipated Enrollment		Implementation Year		
Please state how many students/credit hours are expected within the program during the initial year of the program?				
		Full-Time	Part-Time	
A. Headcount:		8	8	
Part II. Initial Budget		Implementation Year		
A. Faculty		Existing: 0	New: 1 FT, IPT	Funding Source: GF
Full-time	# 1	\$	\$ 60,000	General Fund
Part-time/Adjunct	# 1	\$	\$ 14,000	General Fund
		Amount	Funding Source	
B. Equipment required for program		\$ 214,000	General Fund	
C. Tools and/or supplies required for the program		\$ 24,000	General Fund	
D. Instructional Supplies and Materials		\$ 2,000	General Fund	
E. Facility requirements, including facility modifications and/or classroom renovations		\$ 95,000	Capital Outlay	
F. Technology and/or Software		\$ 8,000	General Fund	
G. Cost of Insurance		\$		
H. Lease		\$ 9,000	General Fund	
I. Furnishings		\$ 26,000	General Fund	
Total For Implementation Year		\$ 452,000		

PROGRAM SUSTAINABILITY COSTS (First Two Years)

Part I. Program Enrollment		First Two Years		
Please state how many students/credit hours are expected within the program during the first two years of the program?				
		Full-Time	Part-Time	
A. Headcount:		18	18	
Part II. Ongoing Program Costs		First Two Years		
A. Faculty		Existing: 1 FT, IPT	New: 1FT	Funding Source:
Full-time	# 2	\$ 60,000	\$ 60,000	General Fund
Part-time	# 1	\$ 14,000	\$	General Fund
		Amount	Funding Source	
B. Equipment required for program		\$		
C. Tools and/or supplies required for the program		\$ 24,000	General Fund	
D. Instructional Supplies and Materials		\$ 2,000	General Fund	
E. Facility requirements, including facility modifications and/or classroom renovations		\$ 20,000	Capital Outlay	
F. Technology and/or Software		\$ 8,000	General Fund	
G. Cost of Insurance		\$		
H. Lease		\$ 9,000	General Fund	
I. Furnishings		\$ 6,000	General Fund	
Total For Year 2		\$203,000		

KBOR Excel in CTE Fee Summary for Proposed Academic Programs

CA-1b Form (2020)

*Per statute (K.S.A. 72-3810), the Kansas Board of Regents shall establish general guidelines for tuition and fee schedules in career technical education courses and programs. The Excel in CTE tuition and fee schedule of every technical education program shall be subject to annual approval.
Please include all costs charged to **high school students** for the proposed new program.*

Program Title:	Climate and Energy Control Technologies (HVAC)
Program CIP Code:	47.0201

*Please list all fees associated with this program:
Only list costs the institution **is** charging students.*

Program Fee	Short Description	Amount
Books -- At Cost	Textbooks/Electronic Access Codes	Varies
Uniforms -- Not to Exceed	Two Uniform Shirts	\$80
Tools	Hand Tools and Meters -- First Semester	\$250
Tools	Hand Tools and Meters -- First Semester	\$200
PPE	Including Gloves and Safety Glasses	\$20
Certification Fees	EPA Cerification	\$30
OSHA - 10	OSHA-10 Certification	\$25

*Please list all courses within the program and any fees associated to those courses:
Only list costs the institution **is** charging students. Do not duplicate expenses.*

Course Fee	Short Description	Amount

*Please list items the student will need to purchase on their own for this program:
Institution **is not** charging students these costs, rather students are expected to have these items for the program.*

Item	Short Description	Estimated Amount

Carl D. Perkins Funding Eligibility Request Form

Strengthening Career and Technical Education for the 21st Century Act

CA-1c Form (2020)

Name of Institution	Dodge City Community College
Name, title, phone, and email of person submitting the Perkins Eligibility application <i>(contact person for the approval process)</i>	Dr. Clayton Tatro, VP – Workforce Development ctatro@dc3.edu 620-224-9856
Name, title, phone, and email of the Perkins Coordinator	Dr. Clayton Tatro, VP – Workforce Development ctatro@dc3.edu 620-224-9856
Program Name	Climate and Energy Control Technologies (HVAC)
Program CIP Code	47.0201
Educational award levels <u>and</u> credit hours for the proposed request	44 credit hours – Certificate 60 credit hours – AAS Degree
Percentage of tiered credit hours for the educational level of this request	Certificate – 100% AAS Degree – 73%
Number of concentrators for the educational level	TBD
Does the program meet program alignment?	Yes.
Justification for conditional approval: <i>(this section must reference information found within the Local Needs Assessment)</i>	See included.

Signature of College Official Clayton N. Tatro Date 4/22/20

Signature of KBOR Official _____ Date _____

According to the data analysis, what programs/pathways (if any) are not offered but are needed in the region?

Program	Evidence from Kansas Labor Market Data	Evidence from Regional Sources
Agriculture, Agriculture Equipment Technology, Agronomy, Agribusiness Systems	Agriculture and agriculture related industries support 12.7% of the entire workforce in the state. This sector supports 134,057 jobs in Kansas.	The total annual openings in these programs is close to 1000 with an average entry-level wage of \$37,500.
Business Administrative Technology	The projected growth from 2018-2028 is predicted to be average at 4% to 6% with projected job openings estimated to be 158,000.	There is an average of 198 total annual openings in this region with an average entry-level wage of \$23,000.
Home Health Aide—for clarification, this is a higher classification than CNA and requires an additional certificate	The projected growth from 2018-2028 is predicted to be much faster than the average (11% or higher) with projected job openings estimated to be 141,000.	The total annual openings is 164 positions with an average entry-level salary of \$17,000.
Marketing	This pathway has very high demand, but wages are not strong.	Wage data is lower than what students would actually make with a technical degree or certificate in marketing, as it includes non-marketing careers like cashiers and sales clerks.
Energy	The Energy pathway/program is a new, and up-and-coming. The timing couldn't be more perfect as the industry demand is flourishing in our region, thus creating the gap. It will take time to get completers in this pathway/program, however, the demand will still be present. This pathway is present at the secondary level, however, absent at the post-secondary level.	The average entry-level salary is \$50,000 with 41 total annual openings.