Texas Education Agency

CANUTILLO H S

T-STEM Renewal Application

2021-2022

Contents

Background

District Affiliation

CANUTILLO ISD

CD #: 071907
Region: 19
Mailing Address (Line 1): P O BOX 100
Mailing Address (Line 2):
City, State, Zip: CANUTILLO, TX 79835

School Affiliation

CANUTILLO H S

CDC #: 071-907-001
Region:
Mailing Address (Line 1): P O BOX 100
Mailing Address (Line 2):
City, State, Zip: CANUTILLO, TX 79835

Academy Information

What is the academy name?

Canutillo High School T-STEM Academy & Canutillo Middle School STEAM Academy

Which model does the district intend to implement at this time? Within these models, there are variations.

School-Within-School (SWS) - A subset of students on the campus are enrolled in grades 9-12 are enrolled in the academy.

Grade Levels Served

What grade level(s) will your academy plan to serve in the 2021-2022 school year?

6
7
8
9
10
11
12

Enter the number of students that you plan to serve in 6th grade.

245

Enter the number of students that you plan to serve in 7th grade.

235

Enter the number of students that you plan to serve in 8th grade.

235

Enter the number of students that you plan to serve in 9th grade.

50

Enter the number of students that you plan to serve in 10th grade.

45

Enter the number of students that you plan to serve in 11th grade.

40

Enter the number of students that you plan to serve in 12th grade.

40

Contacts

Applicant

Applicant 1

Job Title

Christopher Judge

Name Prefix

Mr.

First Name

Christopher

Last Name

Judge

Email

cjudge@canutillo-isd.org

Phone

9158777903

Principal

Principal 1

Name Prefix

Ms.

First Name

Teresa

Last Name

Clapsaddle

Email

tclapsaddle@canutillo-isd.org

Phone

915-877-7801

Superintendent

Superintendent 1

Name Prefix

Dr.

First Name

Pedro

Last Name

Galaviz

Email

pgalaviz@canutillo-isd.org

Phone

915-877-7400

Narratives

Current Designations at CANUTILLO ISD:

- CANUTILLO H S - T-STEM - 2021

- NORTHWEST EARLY COLLEGE H S (NWECHS) - ECHS - 0809

- CANUTILLO MIDDLE - T-STEM - 1617

Previous Planning Year Applications at CANUTILLO ISD:

Narratives

The majority of the following questions will be narrative response. Narrative responses are limited to a maximum of 250 words. We recommend writing your responses in a text-editing software such as Microsoft Word and then pasting your responses into the website when they are complete. Progress to the next section when you are ready.

Narratives: Degrees and Credentials, Recruitment and Enrollment

Degrees and Credentials

Select the Career Cluster(s) that your academy plans to offer in 2021-2022.

STEM

Select the Career Cluster(s) that your academy plans to offer in 2021-2022.

Biomedical Science
Cybersecurity
Engineering

Which of the following credential(s) does the academy plan to offer students in 2021-2022 school year?

NYD

The T-STEM academy shall provide a rigorous course of study that enables students to receive a high school diploma and complete industry certifications, work-based learning experiences, and/or early college credit during grades 9-12. Describe how the campus will develop a rigorous course of study that will enable a participant to receive a high school diploma and complete industry certifications, work-based learning experiences, and/or early college credit during grades 9-12.

Our T-STEM Academy is preparing to provide extended opportunities to our current pathways through the expansion of our CTE programs and infrastructure. Our campus will be expanding to accommodate a state of the art facility that will enable our district to offer work-based learning experiences, and industry certifications on site. Our students already have the opportunity to earn early dual college credit through our Advanced Academics At Canutillo Middle School we have crafted our Master Schedule where every student will have access to STEM/STEAM related content. Grades 6-8 will engage in meaningful STEAM classes, where they will be able to apply the Engineering Design Process. We offer PLTW Design and Modeling, MS Computer Science,, PLTW Tech App and Drones, PLTW Automation and Robotics, Foundations of STEAM, and Gamming. These classes are best suited for our campus so they can better prepare themselves for the STEM Academy at the High School.

Does the IHE partner currently have an articulation agreement with a four-year IHE detailing how a student's associate degree and accrued credits could lead to a baccalaureate degree?

Yes

Provide the university name that your IHE partner has an articulation agreement with and the

bachelor degree that students could earn using their associate degree and accrued credits. Each row represents a degree.

2-Year Degree	University	4-Year Degree
AA/AS	The University of Texas at El Paso	BA/BS

Recruitment and Enrollment

Describe any changes in established plans for recruitment and enrollment process that meet open enrollment requirements.

Canutillo ISD is committed to attracting the most highly qualified candidates to our schools to be enrolled in the CHS STEM and CMS STEAM Academy. Our goal is for both CHS STEM and CMS STEAM Academy strive to offer an optimum learning environment for students. High School STEM leaders will begin to engage with incoming freshman virtually. Presentations will be provided to all students in 8th grade, which they will have a better outlook on what is to be offered at CHS STEM Academy. Our CTE Director and Coordinator have utilized the Nearpod progam to provide a virtual tour to all MS students of the variety CTE strands being offered, STEM being one. Every week students were engaged in the curriculum to understand the types of programs offered. We will continue our Summer Bridge Approach for students entering the High School and Middle School. This will also be offered to all students within the different STEM cohorts. Now that CISD is a 1-1 school district and all students have a device, we can collaborate virtually.

Narratives: Strategic Partnerships: IHE, Strategic Partnerships: Business Partner

Strategic Partnerships: IHE

IHE Partner 1

Affiliation

El Paso Community College

Name Prefix

Ms.

First Name

Tonie

Last Name

Badillo

Email

Mbadill4@epcc.edu

Phone

915-831-6755

Job Title

Dean of Dual Credit and Early College High Schools

The T-STEM academy shall have strategic partnerships with business and industry partners and Institutions of Higher Education (IHEs) that are formally articulated in writing and clearly define a variety of STEM careers.

Describe how the IHE articulation agreement addresses the following IHE Blueprint Requirement: Curriculum alignment and courses of study, which enables a student to combine high school courses and college-level courses to earn either an associate degree, postsecondary certificate provided by an IHE, or industry certification.

We have established MOU's with El Paso Community College (EPCC) for Dual Credit courses and with the University of Texas at El Paso (UTEP) for mentorship and guidance. Canutillo ISD and its STEM Academies are also a part of Region 19 College Readiness team, which meets quarterly with the entire region on College Readiness. AP courses are also apart of the STEM Academy, where students can earn college credit by passing the AP Exam. The following are the AP and Dual Credit courses offered: AP - Human Geography, World History, US History, Chemistry, Biology, English 3, English 4, Stats, Calculus, Computer Science, PLTW Comp Science, Computer Programming, Physics 1, Physics 2, French 3, French 4, Spanish 3, 4, and 5. DC- EDUC 1300, English 1301 and 1302, English 2322 and 2323, Math 1214 and 1324, History 1301 and 1302, Government 2305 and 2306, Geology 1301 and 1302, Philosophy 23006, ASTR 1304 and HIST 2321 and 2322. Students will view their high school courses as a degree plan which will lead them to a STEM career and/or post-secondary degree in a STEM related field. At Canutillo MS STEAM Academy we are building a Master Schedule that will support the needs of the STEM program at the HS. Grades 6-8th will have year long courses in Engineering, Business, Green Architecture, Foundation of STEAM, Design and Modeling, App Creators, Gaming, Computer Science, Automation and Robotics, Spanish 1 and Spanish 2 and Technology Applications. CMSSA also partners with UTEP and EPCC.

Describe how the IHE articulation agreement addresses the following IHE Blueprint Requirements: Policies for: 1) advising students on the transferability of all college credit offered and earned, 2) ensuring the IHE transcripts college credit earned through dual credit in the same semester that credit is earned, 3) advising students as to the transferability and applicability to baccalaureate degree plans for all college credit offered and earned (college credits earned during high school should allow students to progress from an associate degree to a bachelor's degree and beyond in their chosen field), 4) students accessing the IHE facilities, services and resources

Counseling staff at CHS and CMSSA support T-STEM students, including activities such as: coordinating with Institutions of Higher Education (IHEs) for registration and monitoring of students' high school and college transcripts and monitoring high school and college courses to ensure all requirements are met. Counselors also promote a college culture by providing college entrance aid, college fairs, college trips and scholarship awareness. Counselors, administration, and teachers constantly monitor progress on meeting the T-STEM Blueprint, including reviewing data to ensure the T-STEM is on-track to meet outcomes-based measures. We have a total of 9 EPCC credential dual credit instructors and 6 enrolled in a continuing education scholarship program with CREEED to meet credentialing requirements (see MOU). There is also an MOU in place with EPCC/UTEP regarding HB5 College Prep Math and Integrated Reading and Writing course that if successfully passed by a senior, will take the place of the TSI. Canutillo Middle School STEAM Academy students in 8th grade will take the TSI placement test in Reading and Math in preparation for high school and college course enrollment. UTEP and EPCC have provided presentations, seminars, and access to their laboratories for the STEM and STEAM Academy students .

Describe how the IHE articulation agreement addresses the following IHE Blueprint Requirements: Transportation costs and fees including provisions for discontinuing operation while ensuring students previously enrolled will have opportunity to complete their course of study.

All AP and Dual Credit courses are provided on campus at Canutillo High School; therefore, there are no associated transportation costs. Students who transfer out of the school or district will be able to continue their course of study pending student location. At CMS there are no Dual Credit courses offered. However; at CMS STEAM Academy, we have began offering 6th grade student Math 8HRS, which by the time they leave CMS STEAM Academy they will have Algebra 1 and Algebra 2 High School Credits.

Describe how the IHE articulation agreement addresses the following IHE Blueprint Requirements: Data sharing agreement that includes provisions for teacher data such as qualifications and student level data such as credit hours taken and earned, GPA, formative data to assess if student is on track for college readiness

Dual Credit credentialing information is on file with CISD HR Dept as well as EPCC which will ultimately determine if a teacher has met the qualifications to be a HS Dual Credit instructor. CHS Academy provides stipends for teachers who instruct Dual Credit courses in the amount of $500 per course. Students in the academy will have the opportunity to take Dual Credit courses beginning their Freshman year. Currently Canutillo HS offers DC- EDUC 1300, English 1301 and 1302, English 2322 or 2323, Math 1314, 2412 and 1324 History 1301 and 1302, Government 2305 and 2306, Geology 1301 and 1302, Philosophy 2306, ASTR 1304 and HIST 2321 or 2322. CHS STEM and CMS STEAM Academies leadership team continues to meet regularly with the leaders from the district and the IHE. Dual Credit teachers are evaluated by an EPCC administrator where pertinent feedback is given to the teacher on how to conduct or better improve a well rounded Dual Credit class that support the needs of a high school students. Students GPA are closely monitored by the Dual Credit instructor in which he/she will determine based on the policies of EPCC if the student will remain in the course. Canutillo Middle School is assisting the CHS by TSI testing 100% of the 8th grade students. Also providing remediation to those that were not successful on the first round of TSI testing.

Strategic Partnerships: Business Partner

Business/Industry Partner 1

Affiliation/Company

The Hospital of Providence Transmountain Campus

Job Title

CEO

Name Prefix

Mrs.

First Name

Tasha

Last Name

Hopper

Email

tasha.hopper@tenethealth.com

Phone

915-877-8300

Business/Industry Partner 2

Affiliation/Company

CREED

Job Title

Partner

Name Prefix

Mr.

First Name

Richard

Last Name

Castro

Email

rcastro25@aol.com

Phone

915-599-2982

Describe how the Business/Industry articulation agreement addresses the following Business/Industry Blueprint Requirements: Clear roles and responsibilities for work site supervisors, mentors, teachers, support personnel, and other partners.

The responsibilities of the Hospital shall accept the students assigned to the program by Canutillo HS after completion of the program participant orientation. Hospital will provide the opportunities for CHS students, who shall be supervised by School and Hospital, to observe and assist in various aspects of patient care. Hospital will coordinate School rotation and assignment schedule with its own schedule and those of other educational institutions. Hospital will at all times retain ultimate control of the Hospital and responsibility for patient care. Students will be treated as trainees who have no expectation of receiving compensation or future employment from the Hospital or School. Canutillo MS will visit the hospital for learning experiences. Students will be able to evaluate the nurses, doctors, etc...to learn more about the dynamics of Patient Care.

Describe how the Business/Industry articulation agreement addresses the following Business/Industry Blueprint Requirements: Support for students' activities, such a clubs, Career and Technical Student Organizations, competitions, and special invitations.

CHS STEM Academy have adopted the STEM HOSA at Canutillo HS. This program is geared towards students, where HOSA is to empower HOSA-Future Health Professionals to become leaders in the global health community through education, collaboration, and experience. HOSA-Future Health Professionals is to develop leadership and technical HOSA skill competencies through a program of motivation, awareness and recognition, which is an integral part of the Health Science Education instructional program. Because of the partnership with The Hospital of Providence of Transmountain, students in the PLTW Biomedical courses will be exposed to fields of a variety of doctor opportunities. Biomedical was first implemented in the 2017-18 school year, which now this will be the 4th year of its existence at Canutillo High School. Students started with Principles of Biomedical and will continue to add the subsequent biomedical courses in the sequences as the students' progress through their high school years, to conclude with the implementation of capstone Biomedical Innovation course. Students have been invited to participate in a variety of engagement opportunities with the Hospital, such as The da Vinci Surgical System, The da Vinci Surgical System is a robotic surgical system is designed to facilitate surgery using a minimally invasive approach, and is controlled by a surgeon from a console. Students were given the opportunity to stitch up a grape using this device.

Describe how the Business/Industry articulation agreement addresses the following Business/Industry Blueprint Requirements: Student access to business and industry partners and work-based learning facilities, services, and resources.

Canutillo High School STEM Academy will be responsible for the implementation and operation of the clinical component of the program of the Hospital. The program will be approved by the Hospital in advance. Students will need to understand this is a professional work environment thus an orientation for students will be conducted. Students will need to have prior knowledge of classroom theory and practical instruction to students prior to their clinical assignments at the Hospital. Students will need to be prepared for the student/patient assignments and rotation plans with the Hospital. Continuing oral and written communication with Hospital regarding students performance and evaluation, absences, and assignments of students. There will mandatory supervision by the CHS instructor to determine student performance at Hospital.

Describe how the Business/Industry articulation agreement addresses the following

Business/Industry Blueprint Requirements: Transportation fees and costs.

Transportation will be provided by Canutillo HS which will come out of the school operating budget.

Narratives: Regional Workforce Alignment, Work-Based Learning

Regional Workforce Alignment

List the regional high-demand occupations your academy intends to address through selected program(s) of study and work-based learning.

Regional High-Demand Occupation
Medical Assistants and Pharmacy Technician
Software Developers, Applications
Dental Hygienists
Computer Systems Analysts
Computer Network Support Specialists
Patient Care Technician

Work-Based Learning

Complete the activity tables below illustrating the work-based learning activities that your academy plans to offer students at each grade level. Please ensure the activities are STEM focused.

Add up to three activities offered to 6th grade students.

6th Grade Activities
Foundations of STEAM
Gaming

6th Grade Activities

Add up to three activities offered to 7th grade students.

7th Grade Activities

Design and Modeling

Automation and Robotics

Advance Green Architecture

Add up to three activities offered to 8th grade students.

8th Grade Activities

Computer Science

Tech App and Drones

Add up to three activities offered to 9th grade students.

9th Grade Activities

Intro to Engineering Design

Intro to Biomedical Science

Foundations of Cyber Security

Add up to three activities offered to 10th grade students.

10th Grade Activities

Principles of Engineering

Human Body Systems

Internetworking Tech 1

Add up to three activities offered to 11th grade students.

11th Grade Activities

Computer Integrated Manufacturing

Medical Interventions

Networking Lab or AP Computer Science
11th Grade Activities

Add up to three activities offered to 12th grade students.

12th Grade Activities

Engineering Design and Development

Biomedical Innovation

Capstone

Narratives: Advanced Academics

Advanced Academics

Select the type of advanced courses (dual credit/AP/IB) your campus plans to offer students in 2021-2022.

DC
AP

What type of dual credit courses does your campus plan to offer?

AGCM

Describe any challenges in ensuring your academy has educators with qualification to teach dual credit. What steps did your academy take to address the need?

The Canutillo school district has a partnership with CREED that supports teachers in getting credentialed to teach Dual Credit courses by providing tuition assistance. We have a total of 9 EPCC credentialed dual credit instructors and 6 enrolled in a continuing education scholarship program with CREED to meet credentialing requirements. There is also an MOU in place with EPCC/UTEP as our IHE. Canutillo Middle School STEAM Academy does not offer Dual Credit courses, however CMSSA are offering a variety of HS credit from Alg 1 to Electives. We are also TSI testing all of our 8th grade students therefore being prepare to take Dual Credit classes when entering the 9th grade.

Is the academy a TSIA testing site?

Yes

Narratives: STEM-Focused Extracurriculars, Curriculum and Support

Curriculum and Support

Provide examples of how the campus plans to provide students with academic services. List activities and brief descriptions of the activities. Add a new row for each provided service.

Activity	Description
GPC Plans	Students will meet with counselor, using the STEM specific GPC form to guide students on what to take for the following year.
STEM Tutoring	Students will be able to engage with teachers to help support their academic needs.
Mentoring Minds	Students will engage in SEL curriculum, CTE curriculum, and Interventions throughout the year.
TSI Interventions	Students who needs extra help to be successful on the TSI will be able to get tutorial assistance
Counselor Meetings	Counselors have real world conversations with students and their action plan for school leading up to college. This is done at the MS level as well.

Provide examples of how the campus plans to provide students with wrap-around services. List activities and brief descriptions of the activities. Add a new row for each wrap-around service.

Activity	Description
SEL Counselor Presentations/ Curriculum	This is done twice a week. Counselors either present or teachers engage in the curriculum with students to discuss and cope with SEL perspectives.
Parent Liasion	Supports parents and students who needs extra support and rap around services.

How does your academy use the access, achievement, and attainment data for program improvement?

The academy uses the access, achievement, and attainment data to evaluate the Goals of the academy. Both STEM and STEAM Academies are evaluating assessing the goals to better support the needs of the students. After we have established our goals we have developed specific measures that reflect our STEM and STEAM goals There have been a change in administration at both campuses and both STEM coordinators are assessing the OBMs and collaborating together to be in line with the future

successes of the academies.

STEM-Focused Extracurriculars

Describe the STEM-focused extracurricular activities (field experiences, clubs, and competitions) offered to students.

At the CHS STEM Academy, students have many opportunities to be involved and partake in extracurricular activities on and off campus. Through these STEM experiences and extracurricular activities, we are producing highly motivated students who will be able to develop through leadership, scholarship, loyalty and self-supportive opportunities in a leadership position. Students participated and competed in the following extracurricular activities: VEX Robotics2. TSA Robotics3. Tiny Home Challenge- STEM Competition STEM HOSA STEM Drone Competition- STEM Competition Summer Bridge Mentor- Current STEM Students to help in the summer STEM Council- STEM Officers to help with tasks within the academy Student Council- STEM Officers required to attend Burrell College of Osteopathic Medicine- Tour of the labs and facilities VEX Worlds Championships- Robotics team qualifier TSA State Robotics Competition-State qualifiers FRC Robotics El Paso Regional Competition Robotics team will attend to view STEM Chick Fil A Leadership Academy- Students help in a big picture service project University of Texas at El Paso (UTEP)- Tour of the Engineering and Biomedical Facilities FBLA- State and National qualifiers DECA-State and National qualifiers Math Team- State Champions in Calculator STEM Innovative Classroom- Setting STEM- CHS and CMS STEM Students Meet and Greet CHS STEM Academy Virtual Reality Exhibits: Student Lead At the middle school, in addition to their STEAM courses, the school offers VEX BOT Robotics Club, Girls Who Code, STEAM Art Club, Summer Bridge Program, and our Positive Behavior Intervention System has a STEAM (environmental focus).

Narratives: Leadership Team

Leadership Team

List the Leadership Team's three priorities for the next year and describe how the selected priority contributes to the academy's success. Each priority should be a benchmark from the ECHS/T-STEM/P-TECH Blueprint.

Benchmark	Description
Benchmark 1	STEAM Cohesive Leadership Team
Benchmark 2	Recruitment and retain sub populations of at risk students
Benchmark 2	Recruitment and the enrollment process from the surrounding Middle School

Benchmark   Description

Narratives: Benchmark 1 Products, Benchmark 2 Products, Benchmark 3 Products, Benchmark 4 Products, Benchmark 5 Products, Benchmark 6 Products, Benchmark Products

Benchmark Products

Benchmark 1 Products

Provide a link to the academy's mentor/induction program plans.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's annual training or professional development plan with the academy and IHE faculty

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's leadership meeting agendas and notes.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Benchmark 2 Products

Provide a link to the academy's written admission policy and enrollment application

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's written recruitment plan including a timeline of recruitment and enrollment events, and recruitment materials for distribution at feeder schools and other appropriate locations in the community.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's brochures and marketing in Spanish, English, and/or other relevant languages.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's written recruitment plan including a timeline of recruitment and enrollment events, and recruitment materials for distribution at feeder schools and other appropriate locations in the community.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Benchmark 3 Products

Provide a link to the academy's meeting agendas and minutes, with action items and decision logs.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's final, signed, and executed MOU with their industry partner/business.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's final, signed, and executed MOU with their IHE

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's list of strategic partners with each member's organization, title and role in providing work-based learning for students by grade level.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Benchmark 4 Products

Provide a link to the academy's four-year crosswalk document

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's master schedule.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's curriculum alignment documents.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's testing calendar and schedule for TSI, ACT, SAT or other assessments.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's documentation detailing a minimum of three course of study examples that outline student pathways from high school, to associate degrees, to work credential and beyond.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Benchmark 5 Products

Provide a link to the academy's documentation of appropriate work-based learning expereinces for students at all grade levels.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's current dated regional high demand occupation list.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's aggregate data describing student participation in work-based learning experiences as well as percentage of students earning industry certification and credentials by type.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's samples of student artifacts such as writing, portfolios, presentations, or links to digital content.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Benchmark 6 Products

Provide a link to the academy's bridge program calendar and curricula.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link the academy's tutoring and other intervention/remediation program schedules,

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint

Provide a link to the academy's calendar of family outreach events.

http://chs.canutillo-isd.org/academics/stem/t-stem_blueprint