



DESOTO HS & ISTEAM3D
T-STEM Renewal Application
2020-2021

Contents

[Background](#)

[Contacts](#)

[Narratives](#)

[Narratives: Degrees and Credentials](#)

[Narratives: Strategic Partnerships: IHE, Strategic Partnerships:
Business Partner](#)

[Narratives: Regional Workforce Alignment, Work-Based
Learning](#)

[Narratives: Advanced Academics](#)

[Narratives: STEM-Focused Extracurriculars, Student Support](#)

[Narratives: Leadership Team](#)

[Narratives: Benchmark 1 Products, Benchmark 2 Products,
Benchmark 3 Products, Benchmark 4 Products, Benchmark 5](#)

[Products, Benchmark 6 Products, Benchmark Products](#)

[Download Assurances Signature Page](#)

Background

District Affiliation

DESOTO ISD

CD #: 057906

Region: 10

Mailing Address (Line 1): 200 E BELT LINE RD

Mailing Address (Line 2):

City, State, Zip: DESOTO, TX 75115

School Affiliation

DESOTO H S & ISTEAM3D

CDC #: 057-906-001

Region:

Mailing Address (Line 1): 600 EAGLE DR

Mailing Address (Line 2):

City, State, Zip: DESOTO, TX 75115

Academy Information

What is the academy name?

DeSoto HS & ISTEAM3D

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 2020-2021 school year?

9
10
11
12

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

312

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

230

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

224

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

219

Contacts

Applicant

Applicant 1

Job Title

CTE/STEM Coordinator

Name Prefix

Mrs.

First Name

Melinda

Last Name

Pugh

Email

melinda.pugh@desotoisd.org

Phone

972-230-0726

Principal

Principal 1

Name Prefix

Mr.

First Name

Shon

Last Name

Joseph

Email

shon.joseph@desotoisd.org

Phone

972-230-0726

Superintendent

Superintendent 1

Name Prefix

Dr.

First Name

D'Andre

Last Name

Weaver

Email

DAndre.weaver@desotoisd.org

Phone

972-223-6666

Narratives

Current Designations at DESOTO ISD:

- DESOTO H S & ISTEAM3D - ECHS - 1415
- DESOTO H S & ISTEAM3D - T-STEM - 1415

Previous Planning Year Applications at DESOTO 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

Degrees and Credentials

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

Agriculture
Arts AV Tech & Communication
Business Marketing Finance
Education and Training
Health Science
Hospitality & Tourism
Human Services
Information Technology
Law & Public Service
Manufacturing
Transportation Logistics Distribution

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Animal Science
Plant Science

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Digital Communications
Graphic Design and Multimedia Arts

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Accounting and Financial Services
Business Management
Entrepreneurship
Marketing and Sales

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Early Learning
Teaching and Training

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Healthcare Therapeutics

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Culinary Arts
Lodging and Resort Management
Travel, Tourism, and Attraction

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Family and Community Services

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Information Technology Support and Services
Networking Systems
Programming and Software Development
Web Development

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Government and Public Administration
Law Enforcement

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

Engineering
Welding

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Automotive

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

PSC
IC

What level 1 postsecondary certificate(s) provided by an IHE does the academy plan to offer?

Item

CHASSIS Service Technician

What industry certifications does the academy plan to offer?

Item

OSHA 30 Hour General Industry

Texas State Floral Association Level One Floral Certification

Certified Veterinarian Assistant, Level 1

Microsoft Office Specialist Word

Microsoft Office Expert Excel

Microsoft Office Expert Word

Child Development Associate (CDA)

Cosmetology Operator License

CompTIA A+ Certification

CompTIA IT Fundamentals+

AWS D1.1 Structural Steel

AWS D9.1 Sheet Metal

Certified SolidWorks Associate (CSWA)

ServSafe Manager

Certified Nurse Aide/Assistant (CNA)

Phlebotomy Technician

Microsoft Office Specialist Excel

Adobe Certified Associate (ACA) - Illustrator (Graphic Design & Illustration using Adobe Illustrator)

Adobe Certified Associate (ACA) - Photoshop (Visual Design using Adobe Photoshop)

Adobe Certified Associate (ACA) - Premiere Pro (Digital Video using Adobe Premiere Pro)

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
Associate of Arts	Dallas County Community Colleges	Bachelor of Arts
Associate of Science	Dallas County Community College	Bachelor of Science

2-Year Degree	University	4-Year Degree
Associate of Arts in Teaching	Dallas County Community Colleges	Bachelor of Science in Education
Associate of Applied Science	Dallas County Community Colleges	Bachelor of Applied Arts & Sciences

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

Strategic Partnerships: IHE

IHE Partner 1

Affiliation

Cedar Valley College

Name Prefix

Dr.

First Name

Jeffrey

Last Name

Miller

Email

jcmiller@dcccd.edu

Phone

972-860-8065

Job Title

Executive Dean, Early Collegiate Discovery Center

IHE Partner 2

Affiliation

Mountain View College

Name Prefix

Ms.

First Name

Lorraine

Last Name

Hoodjack

Email

lhoodjack@dcccd.edu

Phone

214-860-3627

Job Title

Manager, Corporate Accounts & Workforce and Continuing Education

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.

Our agreement with Cedar Valley College allows for our automotive students to take their first two levels of automotive courses (Principles of Transportation Systems and Automotive Technology I) on the high school campus to receive high school credit. The next two courses in the high school program of study (Automotive Technology II and Practicum in Transportation Systems) are taken as dual credit courses on the campus of Cedar Valley College. Students are afforded the opportunity to earn both HS and college credit simultaneously. Students take one more additional automotive summer course between their 3rd & 4th year (Co-Op) which allows them to obtain their CHASSIS Service Technician Level 1 certificate. Completion of these courses also allows our students the opportunity to participate in the Cedar Valley College graduation ceremony, to be recognized as completing a Level 1 certificate through the college. Our agreement with Mountain View College is similar. Students take their first three levels of courses in the pathway with high school instructors. During their 4th year (the practicum course) students take classes with an instructor from Mountain View College in either CNA or Phlebotomy and are able to sit for the certification test upon their completion. Students earn continuing education credits during the process.

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

The IHE articulation agreement includes that college credit will be awarded for lower division courses

which are allowed by the Texas Higher Education Coordinating Board. The College warrants and represents that the courses offered under our agreement have been evaluated and approved through the official college curriculum approval process in accordance with Texas Higher Education Coordinating Board requirements and Texas Education Agency requirements for high school graduation and that they are at a more advanced level than courses taught at the high school level. Transcription of credit for dual credit courses, high school as well as college credit shall be transcribed immediately upon a student's completion of the performance required in the course. According to our agreement, students have the option to transfer their credits from an associate degree to one of the partnering schools to receive a baccalaureate degree as well. Students can also use their Level I and Level II certificates earned to move into the workforce with the help of partners in the Dallas Regional Chamber, United Way of Metropolitan Dallas, and the Workforce Solutions of Greater Dallas. As a dual credit student, the students have access to any facilities, clubs, services, resources, or any activities that are offered to traditional college students. This feature also allows them to join special study groups and/or tutoring sessions that may be offered by the college campuses.

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.

By written agreement, students attending DeSoto High School, who are enrolled in courses for which they receive joint credit under the Texas Education Code shall not pay tuition. One tuition scholarship per dual credit course per student is allowed; however, scholarships are not provided for repeated courses. The student is responsible for payment of repeated college course(s). The DeSoto ISD covers the cost of textbooks and/or access codes required for each course. DeSoto ISD also covers the cost of transportation for students to be transported to and from the high school campus to the college campus. This also includes any summer sessions that students may take as a group.

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

Each dual credit course offered under the agreement must be taught using a College Common Learning syllabus that is distributed to students and includes course objectives, competencies, and learning outcomes. In addition, the syllabus must specify evaluation methods the instructor will use to assign college grades. DeSoto ISD and our IHE partners collaborate to ensure that the rigor, academic requirements and standards applicable to the dual credit courses being offered are maintained and applied to meet or exceed all accrediting and other regulatory agency requirements. A college supervisor will review the major examinations in each dual credit course to document the requirement that skills and concepts contained in the course syllabus are being taught and tested. If a student is enrolled simultaneously in college and high school, the two schools may share information regarding the student in accordance with the Family Education Rights and Privacy Act. It has also been agreed upon that students will receive progress reports from the college and frequent email communication with their professors. This will allow for monitoring of grades and allow for interventions to take place when needed. The high school is required to provide a contact person who will fulfill the duties of a Dual Credit Coordinator to assist students.

Strategic Partnerships: Business Partner

Business/Industry Partner 1

Affiliation/Company

Texas Instruments

Job Title

Vice President

Name Prefix

Mr.

First Name

Thomas

Last Name

Springmeier

Email

tspringmeier@ti.com

Phone

972-281-7676

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.

Our agreements with our business/industry partners include information that lists the responsibilities of the partner, the district, and the students. These are agreed upon by both parties and outlined in the written agreement. The details may include, but are not limited to: the specific types of experiences that our students will receive, what experiences will be provided by our partners, the expectations of our students and teachers, any monetary expectations, transportation requirements, frequency of experiences, etc. The agreements are signed by both the business/industry partner and the school district representative.

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.

Our industry partners are selected based on the individual pathways that are included in our T-STEM Academy. Industry partners are sought after that will fall directly into these pathways. This allows for us to reach out to our partners to help sponsor and provide leadership for our STEM clubs and other organizations, as well as provide industry expertise for our many competitions. We have various extracurricular activities that occur in our T-STEM Academy. Our students in the STEM/Agriculture pathway participate in competitions/stock shows throughout the state of Texas with various animals. Our high school students are also members of the Future Farmers of America Club and visit the

Agriculture Awareness Day each year at the State Fair of Texas. Our STEM/Automotive students compete in the Skills USA competition on the district, regional, and state level. They also compete at the annual Blinn College competition. The STEM/Health Science department has an active HOSA chapter that participates in an annual blood drive, district health fairs, community health fairs, and a host of other events and activities. The traditional STEM and IT students also have a plethora of STEM-focused extracurricular activities. They are encouraged to join our Robotics team, Solar Car team, and/or the local chapter of the TAME organization. They participate in Dallas Engineers Week, Ten80 STEM challenges, Texas HS Aerospace Scholars, and a host of other STEM related activities.

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.

We have many work-based learning opportunities for our students set up through our industry partners. Various activities/experiences are offered to our students such as, but not limited to: guest speakers, field trips, job shadowing, and paid and unpaid internships. Each of our programs in our T-STEM Academy offer a culminating, senior level practicum course. The practicum course provides the students with the opportunity to receive hands-on learning experiences. Our industry partners are used to help us with our practicum courses by providing our students with the experiences of job shadowing and both paid and unpaid intern opportunities. There are also options available on campus and throughout our district for our STEM students to receive work-based training and/or experiences. Our agriculture students have access to work-based learning through our partnership with the Tri-City Animal Shelter. Students are bused over during the school day in connection with the practicum course. Our health science students complete clinical rotations through the Red Oak Health & Rehabilitation Center, Park Manor Health Care and Rehabilitation, and Charlton Methodist Hospital. Texas Instruments provides field trips and extra activities for our traditional STEM and IT students. They also assist with teacher professional development. A recent partnership with Geekletes (esports) will allow for our students to take field trips and provided internship opportunities for our students. Our automotive students are afforded opportunities through Universal Technical Institute through field trip opportunities, as well as guest speakers for our students.

Describe how the Business/Industry articulation agreement addresses the following Business/Industry Blueprint Requirements: Transportation fees and costs.

All of the activities offered through our business partners are offered to our students at no charge. If field trips are involved, our STEM academy covers the cost of transportation. If meals are required, arrangements are made so that students will be covered either through the STEM academy or our business partner. Guest speakers always come on a volunteer basis and no monetary fees are exchanged. For those courses that visit our partner facilities, the cost of buses are covered through state funds and is free to students. On the rare occasions where there is a cost associated with attendance of a field experience, those student costs are covered through our partnering A2E2 magnet grant.

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

Home healthcare/Nursing

Computer and Information Systems

Transportation, Distribution, and Logistics

Software and Web Developers

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 9th grade students.

9th Grade Activities

Guest Speakers

Field Experiences/Field Trips

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

10th Grade Activities

Guest Speakers

Field Experiences/Field Trips

Job Shadowing

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

11th Grade Activities

Job Shadowing

Industry Tours

Internships

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

12th Grade Activities

Internships

Practicum Courses/Activities

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?

WECM

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?

Our biggest challenge has been finding teachers that are able to teach the dual credit courses on our campus. One step that we took to rectify this situation is to speak with our Human Resources department to ask them to provide us with a listing of everyone in the entire district that has the qualifications of a a master's degree plus the 30 hours. From the generated list, we will match up teachers with the classes that we need to offer to students so that they can receive the dual credit. Another step that we are investigating is to provide the opportunity for interested teachers to enroll in a masters program that is funded by the district. In exchange, the teachers will be required to stay in the district for a number of years after receiving their graduate degree.

Is the academy a TSIA testing site?

Yes

Narratives: STEM-Focused Extracurriculars, Student Support

Student 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
Bridge Programs	Incoming STEM Academy students will participate in a summer bridge program
Mentor Program	Students will be grouped with a mentor based on their STEM pathway
Tutoring	Tutoring will be available for students both before and after school
Saturday School	Occasional Saturday sessions will be available for remediation and acceleration

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
PTSA Meetings	STEM pathways highlighted during PTSA meetings with student participation
Community Outreach	Student participation in community outreach programs

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

Our academy leadership team reviews our data and compares it to the data indicators for access, achievement, and attainment measures. Our ultimate goal is to be distinguished on each level. We use our current data to set yearly goals (to include action steps) so that we can ensure that our academy practices are helping us to reach the distinguished level of achievement. It is our belief that if we are at the distinguished level that we will be exhibiting best practices for all of the students in our academy.

STEM-Focused Extracurriculars

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

We have various extracurricular activities that occur in our T-STEM Academy. Our students on the STEM/Agriculture pathway participate in competitions/stock shows throughout the state of Texas with various animals. Our high school students are also members of the Future Farmers of America Club and visit the Agriculture Awareness Day each year at the State Fair of Texas. Our students provide grooming services to the pets of our district personnel and also job shadow and/or intern at local vet clinics. Our STEM/Automotive students compete in the Skills USA competition on the district, regional, and state levels. They also compete at the annual Blinn College competition. They attend tours to places such as: Texas State Technical College, Universal Technical Institute, and Lockheed Martin. Students also receive field experiences by providing basic car services to the faculty on campus. Our STEM/Health Science students receive field experiences through clinical rotations at our business partner facilities. They also are members of our HOSA club that participates in an annual blood drive and district/community health fairs. Our traditional STEM/IT students are members of BPA and TAME. They compete in annual BPA competitions as well as attend field trips at Dallas Engineers Week, Ten80 STEM Challenge, Texas Instruments, and more.

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
Strategic Alliances	Increase our business/industry partnerships to provide more experiences for our students and to ensure that our programs are aligned with industry needs.
Curriculum, Instruction, and Assessment	We are looking to add more dual credit courses for our students
Curriculum, Instruction, and Assessment	Provide strategies to increase student scores on high stakes testing (TSI, ACT and/or SAT)

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://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

Benchmark 2 Products

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

Benchmark 3 Products

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

Benchmark 4 Products

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

Provide a link to the academy's master schedule.

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

Benchmark 5 Products

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

Benchmark 6 Products

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m

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

http://www.desotoisd.org/departments/curriculum_and_instruction/t-s_t_e_m
