



MILTON B LEE ACADEMY OF SCIENCE & ENGINEERING

T-STEM Renewal Application

2021-2022

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Background

District Affiliation

SCHOOL OF EXCELLENCE IN EDUCATION

CD #: 015806

Region: 20

Mailing Address (Line 1): 1826 BASSE RD

Mailing Address (Line 2):

City, State, Zip: SAN ANTONIO, TX 78213

School Affiliation

MILTON B LEE ACADEMY OF SCIENCE & ENGINEERING

CDC #: 015-806-003

Region:

Mailing Address (Line 1): 1826 BASSE RD

Mailing Address (Line 2):

City, State, Zip: SAN ANTONIO, TX 78213

DR PAUL S SAENZ J H

CDC #: 015-806-041

Region:

Mailing Address (Line 1): 1830 BASSE RD

Mailing Address (Line 2):

City, State, Zip: SAN ANTONIO, TX 78213

Academy Information

What is the academy name?

Milton B. Lee Academy of Science and Engineering

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

Stand Alone Academy: Multiple Campuses - All students on the campus are enrolled in the academy.

Grade Levels Served

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

7
8
9
10
11
12

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

25

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

30

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

30

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

30

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

25

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

25

Contacts

Applicant

Applicant 1

Job Title

Principal

Name Prefix

Ms.

First Name

Valarie

Last Name

Walker

Email

vwalker@excellence-sa.org

Phone

2104319881

Principal

Principal 1

Name Prefix

Ms.

First Name

Valarie

Last Name

Walker

Email

vwalker@excellence-sa.org

Phone

2104319881

Superintendent

Superintendent 1

Name Prefix

Ms.

First Name

Sheilda

Last Name

Madkins

Email

smadkins@excellence-sa.org

Phone

2104319881

Narratives

Current Designations at SCHOOL OF EXCELLENCE IN EDUCATION:

- MILTON B LEE ACADEMY OF SCIENCE & ENGINEERING - T-STEM - 0809

Previous Planning Year Applications at SCHOOL OF EXCELLENCE IN EDUCATION:

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.

Business Marketing Finance
Energy
Health Science
Hospitality & Tourism
STEM

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

Accounting and Financial Services
Business Management
Entrepreneurship

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

Renewable Energy

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

Healthcare Diagnostics
Healthcare Therapeutics
Nursing

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

Travel, Tourism, and Attraction

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

Engineering
Renewable Energy

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

PSC

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

Item

Certified Nurse Assistant

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?

No

Recruitment and Enrollment

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

Milton B. Lee Academy of Science and Engineering is currently in the process of engaging new partners with expertise in marketing and student recruiting. Student enrollment has decreased due to increased competition and the COVID-19 pandemic. San Antonio now has over 170 charter schools and many families are choosing the home school environment for safety reasons. The campus enrollment and recruitment plan will continue to focus on the small environment with quality instruction that embraces students of all levels, races, genders, and socio economic status.

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

Strategic Partnerships: IHE

IHE Partner 1

Affiliation

St. Philip's College

Name Prefix

Dr.

First Name

Adena

Last Name

Williams Loston

Email

aloston@alamo.edu

Phone

2104862900

Job Title

President

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.

The articulation agreement with St. Philip's College and Milton B. Lee Academy of Science and Engineering provides students with the opportunity to complete high school graduation requirements, earn industry-based certifications, and obtain college credits during grades 9 - 12. The dual credit model for the campus in 2020-2021 consists of remote learning and on site clinicals. Working together with the St. Philip's staff, high school and college courses are aligned to pathways for students to complete a certification (CNA) and to establish pathways for associate's and bachelor's degree programs after high school. The counselor and students review degree plans and college/university course catalogs to sequence classes to support degree attainment; such as English 1301/1302, College Algebra, Pre-Calculus, and Calculus. Designees from the College's Office of High School programs and Milton B. Lee Academy work to develop and refine clear and coherent academic course sequences for curriculum alignment. The T-STEM Coach is also involved in this process sharing innovative ideas to align career cluster cross-walks and ensure best practice implementation.

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

Milton B. Lee Academy staff (Administration, Counselor, Registrar) and the assigned Student Success Specialist from St. Philip's College work together to advise students academically. The campus team attends the designated workshop sessions delivered by the College. The professional development workshop sessions prepare participants to provide guidance to high school students throughout the time they are enrolled. Sessions include training to assist student's understanding of college credits

earned, transferability of credits, and processes for receiving college transcripts. Students are assisted with planning and making sure that courses will count toward the degree at their respective 4 year universities of choice or a degree or certification from the College. The Student Success Specialist provides students with academic counseling related to their program of study along with the campus counselor. Each Program of Study on campus has a lead teacher that also helps to advise students and prepare them for higher level course work.

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.

Milton B. Lee Academy is responsible for providing transportation to and from the College by means meeting the requirements of Applicable Law pursuant to applicable School of Excellence in Education Charter District rules and procedures. Any fees incurred by students from the School of Excellence in Education Charter District (SEE) will be billed to the SEE District as the fiscal agent. The Alamo Colleges and the SEE District will share all costs of the Dual Credit Program by payments from one to another determined by which of them primarily funds the cost of the Dual Credit Instructor. Alamo Colleges will waive tuition and fees for students enrolled in the program. Both parties collaborate to ensure student success and completion. The Agreement, except to the extent of any right of the College to make ministerial revisions, may only be amended by mutual written agreement of the parties.

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

While both parties maintain information on shared students, each agree to share data not available to the other to ensure data integrity as both parties use data for enrollment into courses, state reporting, financial matters, and other official business related to High School Programs. Parties agree to share student information exclusively for those students who are in the Dual Credit Program. All instructors teaching Dual Credit courses for college credit must meet the College's academic requirements as outlined by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). Both the Milton B. Lee Academy staff and the St Philip's staff monitor student progress, grades, and credits.

Strategic Partnerships: Business Partner

Business/Industry Partner 1

Affiliation/Company

Leaptran

Job Title

Chief Operating Officer

Name Prefix

Mr.

First Name

Edward

Last Name

Hooks

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edward.hooks@leaptran.com

Phone

210-643-2900

Business/Industry Partner 2

Affiliation/Company

Junior Achievement of South Texas

Job Title

Program Manager/Finance Park

Name Prefix

Mr.

First Name

Martin

Last Name

Longoria

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Phone

2104902007 Ext 105

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.

Although academic programs have been affected by the pandemic, Milton B. Lee Academy of Science and Engineering teachers and administrators maintain interaction with our business partners using creative remote learning programs and activities. Work-based responsibility training and expectations at a work-site are addressed through webinars and zoom lessons with partners and Region 20. The curriculum is aligned to career interest and provides age appropriate knowledge to support student

engagement to promote individual benefits from the learning experiences. Partners provide reality-based learning for students using authentic, tangible, real world scenarios to encourage critical thinking skills and preparation for adult life. Milton B. Lee Academy staff provide supervisory support for students (clinical) on the St Philip's campus for the CTE programs.

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

Many of the activities and events are virtual this year and we continue to participate. Students at Milton B. Lee Academy of Science and Engineering participate in several clubs and competitions each year. Our business partners help to provide opportunities for students to have exposure to professionals in the field. The agreements include: mentorship, scholarship information, internships, funding and workplace exposure. Their collaboration with the campus also supports rigorous classroom experiences. Students participate in various clubs and competitions that include; UIL academics, Texas Alliance for Minorities in Engineering (TAME) Science and Math Competition, FIRST Robotics, Local Art Competitions, and CTE student organizations. Students also attend STEM Symposiums, special events, and meetings sponsored by the business partners and IHE. Students also engage in activities sponsored by the Education Resource Center (Region 20) and Alamo Workforce. Students also participate in special STEM programs sponsored Local Universities and Colleges (St Philip's College, Texas A&M San Antonio, UTSA, UTHSCSA, University of the Incarnate Word, and St

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.

Due to the pandemic, students are not actively participating in work-based learning opportunities for Fall 2020, but will resume regular practice in 2021-2022 when conditions permit. The business partners help to ensure opportunities for students to participate in work-based learning experiences. Partners support Programs of Study curriculum by facilitating locations for students to apply the skills learned in the classroom. Partners also engage in activities with students working together to develop real world solutions to campus and community problems. Partners also work with the campus to help to establish new internships and job shadowing opportunities

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

Milton B. Lee Academy of Science and Engineering is responsible for providing transportation to and from any business location by means meeting the requirements of Applicable Law pursuant to applicable School of Excellence in Education Charter District rules and procedures. Milton B. Lee Academy. There are no fees associated with the Business partnerships

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

Nursing

Finance

Leisure and Hospitality

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 7th grade students.

7th Grade Activities

Virtual and On Site Field Experiences (College and Universities/Industry Facilities)

Guest Speakers (Local, NEPRIS)

STEM Career Day

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

8th Grade Activities

Virtual and On Site Field Experiences (College and Universities/Industry Facilities)

Guest Speakers (Local, NEPRIS)

STEM Career Day

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

9th Grade Activities

Field Experiences (College and Universities/Industry Facilities)

Guest Speakers (Local, NEPRIS)

STEM Career Day

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

10th Grade Activities

STEM Career Day

Health Science Practicum/Engineering

Guest Speakers (Local/NEPRIS/Job Site Speakers)

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

11th Grade Activities

STEM Career Day (On Campus and at College and Universities)

Health Science Practicum/Engineering

Guest Speakers (Local/NEPRIS/Job Site Speakers)

Presentations (Military/Community STEM Leaders)

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

12th Grade Activities

Guest Speakers (Local/NEPRIS/Job Site Speakers)

STEM Career Day (On Campus and at College and Universities)

Health Science Practicum/Engineering

Presentations (Military/Community STEM Leaders)

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?

Milton B. Lee Academy of Science and Engineering participates in the Dual Credit Program with St Philip's College. Our students enjoy the exposure to the college campus and being on site supports the high expectations of the College and the high school campus. Students will also be enrolled in remote courses. St Philip's College is very committed and dedicated to providing a quality education for students and collaborates with our team to ensure that programs are adequate and all staff are professional and highly qualified.

Is the academy a TSIA testing site?

No

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
STEM Bridge Program	Students are provided classes in study skills, Cornell note taking, binder organization, math skills review, and transition from middle school to high school, Endorsement pathway exposure,

Activity	Description
School/Tutoring	Students participate in (Remote/On Campus) a Saturday Camps depending on academic data, intervention needs, or enrichment needs.
Mentorship Program	All students participate in our mentorship program developed using guidelines from the National Mentor Center.

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
Social Emotional Learning	Students participate in Social Emotional Learning with curriculum from Every Monday Matters
Professional Communication Courses	High school students participate and develop the "soft skills" that are essential for success in the workplace.
CPR and First Response Training	Students participate in video training provided by qualified health organizations
Community Outreach and Cultural Recognition Night Community Health Fair	Diverse cultures are recognized with community opportunities for recognition.
Community Health Fair	Parents, students, staff and the community participate in wellness checks and healthy living activities and workshops, as well as health screenings

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

Milton B. Lee Academy has a diverse population recruited from all over the city. It is important to us that every student have full access to all of our programs. Access, achievement, and attainment data are used along with the other data on campus to guide planning for student success. The data supports student graduation plans, intervention/enrichment plans, and career pathway success plans.

STEM-Focused Extracurriculars

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

Milton B. Lee Academy and Dr. Paul Saenz Junior High School students participate in various STEM related activities during the year. Competitions include UIL academics, Texas Alliance for Minorities in

Engineering (TAME), and FIRST Robotics. Students also experience STEM exposure and real world application of academic skills attending JR Achievement Finance Park, and Summits and Career Exploration Days sponsored by Workforce Solutions Alamo and Region 20. Students engage in virtual and on site activities that are STEM focused.

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 5: WorkBased Learning	Milton B. Lee Academy is working to increase the career exploration and experiences at all grade levels to support making the connection between academics and the 21st century workforce.
Benchmark 4: Curriculum, Instruction, and Assessment	The Milton B. Lee team supports the professional growth of the staff and will increase the professional development in AP courses
Benchmark 3: Strategic Alliances	The Milton B. Lee team would like to expand the programs with the IHE to increase dual credit courses that lead to industry-based certifications.in all Endorsement Pathways.

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.

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

Benchmark 2 Products

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

<https://www.excellence-sa.org/apps/pages/lee>

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.

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

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.

<https://www.excellence-sa.org/apps/pages/lee>

Benchmark 3 Products

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

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

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.

<https://www.excellence-sa.org/apps/pages/lee>

Benchmark 4 Products

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

<https://www.excellence-sa.org/apps/pages/lee>

Provide a link to the academy's master schedule.

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

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.

<https://www.excellence-sa.org/apps/pages/lee>

Benchmark 5 Products

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

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

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.

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

Benchmark 6 Products

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

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>

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

<https://www.excellence-sa.org/apps/pages/lee>
