



2019-2021 P-TECH and ICIA Success Grant Program
COMPETITIVE GRANT Application Due 5:00 p.m. CT, Tuesday, April 9, 2019

NOGA ID

Authorizing legislation **GAA, Article III, Rider 67 & 49, 85th TX Leg, and TEC 29.551-29.556 & 29.908**

Applicants must submit one original copy of the application and two copies of the application (for a total of three copies of the application). All three copies of the application MUST bear the signature of a person authorized to bind the applicant to a contractual agreement. **Applications cannot be emailed.** Applications must be received no later than the above-listed application due date and time at:

Document Control Center, Grants Administration Division, Texas Education Agency
 1701 N. Congress Avenue, Austin, TX 78701-1494

Grant period from **June 1, 2019 - June 15, 2021**



Required Attachments

Four (4) attachments are required to be submitted with this application:

1. A completed "Crosswalk" template.
2. A completed "Work-Based Education Matrix" template.
3. A signed and dated MOU with an IHE partner - 3 pages max.
4. A signed and dated MOU with a business/industry partner - 3 pages max.

Amendment Number

Amendment number (For amendments only; enter N/A when completing this form to apply for grant funds):

Applicant Information

Organization CDN Vendor ID ESC DUNS

Address City ZIP Phone

Primary Contact Email Phone

Secondary Contact Email Phone

Certification and Incorporation

I understand that this application constitutes an offer and, if accepted by TEA or renegotiated to acceptance, will form a binding agreement. I hereby certify that the information contained in this application is, to the best of my knowledge, correct and that the organization named above has authorized me as its representative to obligate this organization in a legally binding contractual agreement. I certify that any ensuing program and activity will be conducted in accordance and compliance with all applicable federal and state laws and regulations.

I further certify my acceptance of the requirements conveyed in the following portions of the grant application, as applicable, and that these documents are incorporated by reference as part of the grant application and Notice of Grant Award (NOGA):

- Grant application, guidelines, and instructions
- Debarment and Suspension Certification
- General Provisions and Assurances
- Lobbying Certification
- Application-specific Provisions and Assurances
- ESSA Provisions and Assurances requirements

Authorized Official Name Title

Email Phone

Signature Date

Grant Writer Name Signature Date

Grant writer is an employee of the applicant organization. Grant writer is not an employee of the applicant organization.

2019-019510

701-19-108-007

Shared Services Arrangements

SSAs are not permitted for this grant.

Identify/Address Needs

List up to three quantifiable needs, as identified in your needs assessment, that these program funds will address. Describe your plan for addressing each need.

Quantifiable Need	Plan for Addressing Need
Currently, Fruitvale High School has a population of 63.8% economically disadvantaged and 45.7% at-risk. FISD needs a pathway that leads to a high-wage, in-demand career that provides a smooth transitional experience with multiple exit and entrance points.	FISD will offer a pathway in fall for Mechanical Engineering Technology (MET). This leads to a high-wage occupation and according to Workforce Solutions East Texas Board, industrial and manufacturing engineering technicians are on the targeted and high-demand occupations list. Fruitvale ICIA will target at-risk and economically disadvantaged students with our recruitment efforts.
FISD currently has Vet Med Tech which has a practicum built into the pathway. FISD recognizes the importance of work-based learning and needs to add more of these opportunities into our pathways.	Using flexible scheduling, Fruitvale ICIA will offer a variety of work-based learning experiences to all students enrolled in the program in grades 9-12. Work-based experiences will consist of job career fairs, guest speakers, college visits, job site visits, job mentoring, and paid internships with Mitchell Engineering.
FISD considers academic counseling and social-emotional support necessary to provide students with the best opportunity to successfully complete their certifications and associate degree or 60 college hrs.	Fruitvale ICIA will utilize grant funds to hire a career counselor that will focus on the academic and career needs of students in order to allow for our current high school counselor to focus on building student resiliency and social-emotional health.

SMART Goal

Describe the summative SMART goal you have identified for this program (a goal that is Specific, Measurable, Achievable, Relevant, and Timely), either related to student outcome or consistent with the purpose of the grant.

The goal is to monitor and sustain the Fruitvale ICIA and implement a multiple exit and entrance pathway aligned to mechanical engineering technology pathway needs. Fruitvale ICIA along with our IHE partner, Trinity Valley Community College and our business partner, Mitchell Engineering will collaborate to impact student outcomes: improve 5% the academic outcomes (reading/language arts and mathematics) and technical skills of students enrolled in the program and retain 70% of students in the program working towards an industry certification and/or an associate's degree or 60 hours of college credit as of May 2020.

Measurable Progress

Identify the benchmarks that you will use at the end of the first three grant quarters to measure progress toward meeting the process and implementation goals defined for the grant.

First-Quarter Benchmark

October 2019- track number of students enrolled in ICIA; track TSI progress for these students; initial professional development for ICIA teachers completed; recruitment continues in order to grow enrollment and build towards institutionalization of Fruitvale ICIA; SolidWorks licenses purchased and used in fall classes; continuous data collection- results reported monthly at district and campus improvement meetings, Leadership Meetings, and quarterly advisory committee meetings; changes made as needed; students participating in work-based learning experiences- survey students and business partner upon completion to determine if adjustments need to be made.

Measurable Progress (Cont.)**Second-Quarter Benchmark**

February 2020- track number of students enrolled in ICIA (retention); track TSI progress for these students; ICIA teacher professional development continues (based off information from regional convenings and Educate Texas coaching); recruitment continues in order to grow enrollment and build towards institutionalization of Fruitvale ICIA; continuous data collection-results reported monthly at district and campus improvement meetings, Leadership Meetings, and quarterly advisory committee meetings; changes made as needed; students participating in work-based learning experiences- survey students and business partner upon completion to determine if adjustments need to be made.

Third-Quarter Benchmark

May 2020- track number of students enrolled in ICIA (retention); track TSI progress for these students; ICIA teacher professional development continues (based off information from regional convenings and Educate Texas coaching); recruitment continues in order to grow enrollment and build towards institutionalization of Fruitvale ICIA; continuous data collection-results reported monthly at district and campus improvement meetings, Leadership Meetings, and quarterly advisory committee meetings; changes made as needed; students participating in work-based learning experiences- survey students and business partner upon completion to determine if adjustments need to be made; survey students, teachers, parents, and business partner to ascertain thoughts, comments, and suggestions on the success of year 1 of the Fruitvale ICIA-use results in following Leadership Meetings and with the advisory committee to make adjustments.

Project Evaluation and Modification

Describe how you will use project evaluation data to determine when and how to modify your program. If your benchmarks or summative SMART goal do not show progress, describe how you will use evaluation data to modify your program for sustainability.

Using grant funds, FISD plans to hire a project director for our ICIA. This position will spearhead the project and ensure that all plans are being followed according to our implementation plan and in compliance with all grant requirements and assurances. This position will also ensure that all relevant data for the program is pulled and will present this data to stakeholders. A strength of Fruitvale ISD has always been both district and campus improvement planning. We have had established processes in place for a number of years that provide for a committee (DIT for district and CIT for campus) of various stakeholders (administration, faculty, parents, business members, community members, and students) in evaluating and analyzing data to inform decisions and make project adjustments and modifications when needed. The process to collect data includes monthly reporting to the Leadership Committee and quarterly reporting to the advisory committee. Evaluations will also be conducted following each step in the implementation plan. Changes in program activities will also be considered and recommended as a result of these monthly and quarterly reports. Quantitative and qualitative data will be used in the evaluation process. Quantitative measures include required scheduled reports, graduation rates, attendance percentages (overall and by demographic), TSI, SAT, and ACT testing results, STAAR data, student progress on our district-created employability rubric (measure of soft-skills), surveys from staff, students, parents, and industry-based partners, progress and results of students enrolled in dual credit courses, and student progress along their chosen pathway, list of new courses implemented, monitoring of curriculum for the pathway, number of students recruited for pathway enrollment, and number of work-based learning experiences students participated in. Qualitative evaluation methodologies such as interviews will be utilized as well. The advisory committee will refine, improve, and strengthen the program based on reported data. This will ensure progress toward the summative SMART goal so that the quality of the program implementation is maintained. These strategies include measures designed to show the alignment of local regional workforce needs and target occupations with the MET pathway. Ongoing collaboration and involvement will ensure that recommendations for program improvement are discussed in a timely manner and dealt with promptly. Continual input from stakeholders will ensure quality in all activities. The Leadership Committee will provide monthly briefings to both DIT and CIT.

Statutory/Program Assurances

The following assurances apply to this grant program. In order to meet the requirements of the grant, the grantee must comply with these assurances. Check each of the following boxes to indicate acceptance.

- The applicant provides assurance that program funds will supplement (increase the level of service), and not supplant (replace) state mandates, State Board of Education rules, and activities previously conducted with state or local funds. The applicant provides assurance that state or local funds may not be decreased or diverted for other purposes merely because of the availability of these funds. The applicant provides assurance that program services and activities to be funded from this grant will be supplementary to existing services and activities and will not be used for any services or activities required by state law, State Board of Education rules, or local policy.
- The applicant provides assurance that the application does not contain any information that would be protected by the Family Educational Rights and Privacy Act (FERPA) from general release to the public.
- The applicant provides assurance to adhere to all Statutory Requirements and TEA Program Requirements as noted in the 2019-2021 P-TECH and ICIA Success Grant Program Guidelines.
- The applicant provides assurance to adhere to all Performance Measures as noted in the 2019-2021 P-TECH/ICIA Success Grant Program Guidelines and shall provide TEA, upon request, any performance data necessary to assess the success of the program.
- P-TECH and ICIA schools will provide participating students with flexibility in class scheduling and academic monitoring.
- The P-TECH/ICIA school will be open enrollment. Enrollment decisions will not be based on state assessment scores, discipline, history, teacher recommendations, minimum grade point average (GPA) or any other criteria that create barriers for student enrollment.
- P-TECH and ICIA schools will allow participating students to complete high school and, on or before the sixth anniversary of the date of the student's first day of high school: receive a high school diploma, an associate degree, a two-year postsecondary certificate, or industry certification; and complete work-based education through an internship, apprenticeship, or other job training program.
- P-TECH and ICIA programs will be provided at no cost to participating students.
- LEA will submit an action plan based on blueprint initial self-assessment and needs assessment.
- LEA will submit confirmation of a) the campus/program as a designated Texas Success Initiative (TSI) assessment site and, b) timeline for testing students to ensure that passing rates meet outcome based measures on the P-TECH and ICIA Blueprint.

Statutory Requirements

1. P-TECH and ICIA schools must establish recruitment and enrollment processes and requirements that will not exclude or discourage the enrollment of any of the subpopulations of at-risk students, including, but not limited to, students who are of limited English proficiency or who have failed a state administered assessment. Describe the recruitment and enrollment plan. Include a general timeline and describe the specific activities planned to serve the target population.

The enrollment and recruitment process does NOT exclude or discourage the enrollment of any of the subpopulations of at-risk students. All Fruitvale High School students will be recruited and allowed to enroll in the Fruitvale ICIA.

A timeline of recruitment events has been established and is utilized as a guide for the recruitment and marketing process. Recruitment materials will be distributed at Fruitvale Middle School and other appropriate locations in the community. This includes brochures and posters. Finally, a written communication plan has been approved to target identified audiences, parents, community members, school board, etc. This communication plan includes targeted media outlets (local newspaper, Facebook, etc.), daily announcements, district and campus websites, and the school marquee.

The following recruitment activities have been completed from June 2018 to present: building college and career readiness by adding college flags/posters to school hallways and wearing college shirts once a month, the TVCC Dual Credit Director came to campus and spoke to students regarding pathways (MET in particular), the TVCC MET professor spoke to students about the program and shared information and videos on creating products with SolidWorks, took students on college tours to visit UT Tyler and learn about college life, engineering partner spoke to students about types of engineering and career options, engineering class presented to junior high students, girls in engineering class spoke with girls in junior high to build interest, hosted dual credit night, spring transition night-shared ICIA information with families, and we will host the Bobcat Academy in June to provide students a bridge program with TSI prep and hands-on engineering activities. Next year, we will continue with these activities and continually add to them in order to reach our target demographic.

Statutory Requirements (Cont.)

2. P-TECH and ICIA schools must provide for a program/course of study that enables a participating student in grade levels 9 -12 to combine high school courses and postsecondary courses. Describe the course of study that the school is planning to offer and how it expands upon current offerings. Include how the course of study will enable a student to combine high school courses and postsecondary courses and identify crosswalks, sequence of courses, degrees/certificates/certifications earned, and work-based education that will be available to students at every grade level. Describe how the selected course of study will address regional workforce needs.

This fall Fruitvale ISD will open our ICIA with our new program of study, mechanical engineering technology (MET).The academic plan of the FISD ICIA meets the requirements of the Foundation High School Program and includes four CTE courses in Engineering (Principles of Applied Engineering, Engineering Design and Presentation I, Manufacturing Engineering Technology I, and Practicum in Manufacturing) enabling students to earn a high school diploma in four years with a STEM endorsement. In order to prepare our ICIA instructors, we plan to use grant funds to provide extra duty pay and stipends for those instructors as they will be developing curriculum and attending professional development for an extra week during the summer. Industry Credential(s): Students will have the opportunity to earn the following: Occupational Skill Award, 10 hour OSHA certification, SolidWorks CSWA certification, machining certificate, and a CAD/CAM-CNC certificate through TVCC. Utilizing grant funds, the Fruitvale ICIA plans to hire a SolidWorks instructor to assist students in their SolidWorks drafting classes and help students prepare for and attain their SolidWorks CSWA. Associate's Degree: FISD ICIA academy students will have the opportunity to earn an Associate of Applied Science Degree (AAS) or up to 60 hours of college credit. Bachelor's Degree: For students who complete their associate's degree and wish to continue their education, TVCC has an agreement with the University of Texas at Tyler. Student's credit and AAS from Trinity Valley Community College will be accepted and students can then pursue a bachelor's degree in engineering. Work-Based Study: One hundred percent of the students in program will be given access to appropriate work-based education at each level (9th-12th grades). We will utilize flexible scheduling with students to ensure students have access to work-based learning opportunities. Regional Workforce Needs: Our MET pathway aligns with the Engineering program of study provided by TEA. This leads to high-wage occupations according to Workforce Solutions East Texas.

3. P-TECH and ICIA schools must enter into an articulation agreement with IHEs that are accredited by a national or regional accrediting agency recognized by the Texas Higher Education Coordinating Board (THECB) in accordance with Texas Administrative Code (TAC) §74.25. The articulation agreement must provide a participating student access to postsecondary educational and training opportunities at an IHE and must address all the following items: curriculum alignment, instructional materials, instructional calendar, programs/courses of study, student enrollment and attendance, grading periods and policies and administration of statewide assessments. Name the IHE and describe how the proposed program will meet the requirements for the partnership with the IHE.

The implementation of the ICIA will be built upon a long history of partnership between FISD and Trinity Valley Community College. For over ten years, FISD has partnered with TVCC to provide students at FISD the opportunity to earn dual credit "college basics" while in high school. They work with the district to provide a strong support network, tailored academic advising, and rigorous academic curriculum.

In addition to "college basics", currently TVCC has credentialed one of our staff members to be able to teach TVCC embedded health science classes (Medical Terminology and Medical Ethics) as part of our Health Occupations pathway which leads to a CCMA certification. To earn that certification, students also take dual credit classes for Anatomy and Physiology I & II through TVCC. We also offer our students dual credit College Algebra and Pre-Calculus with a professor here on campus. In addition, we also offer students several online dual credit classes online through an MOU in place with UT Permian Basin. This past experience makes Trinity Valley Community College an ideal IHE partner for Fruitvale High School's new ICIA. In order to maintain a strong partnership with Trinity Valley Community College and ensure that all requirements of the ICIA blueprint are met, we have entered into a separate Memorandum of Understanding for FISD's ICIA. Both the FISD and TVCC agreed upon the responsibilities and duties as required by this grant in the MOU. Each of the parties will agree to appoint a contact person who will be in charge of addressing any questions or concerns when they arise. In addition, each year the college and FISD administration will meet to review and renew the MOU. This will provide each party the opportunity to modify the MOU as deemed necessary. Within the MOU, FISD and TVCC expressly state each party's role and responsibilities in regards to curriculum alignment, instructional materials, instructional calendar, programs/courses of study, student enrollment and attendance, grading periods and policies and administration of statewide assessments.

Statutory Requirements (Cont.)

4. P-TECH and ICIA schools must enter into a MOU with regional industry or business partners in Texas and must meet the following guidelines: provide 100% of participating students access to appropriate work-based education at every grade level, address regional workforce needs, the industry/business partner will give to a student who receives work-based training or education from the partner with a P-TECH and ICIA first priority in interviewing for any jobs for which the student is qualified that are available on the student's completion of the program and be reviewed at least every two years and updated as necessary. Name the regional industry or business partner and describe how the proposed program will meet the requirements for the partnership with the industry/business partner.

Fruitvale High School Industry Cluster Innovative Academy has partnered with Mitchell Engineering to provide work-based training and education to ALL enrolled students. Mitchell Engineering is an engineering company based in Wills Point. They have over 30 years experience in providing engineering and consulting services in the telecommunications sector. In addition to work-based education, Mitchell Engineering has agreed to providing priority interviewing for all qualified candidates in the program. The work-based learning activities offered will be designed to meet students' needs based on their grade level. A detailed breakdown of how the students will receive appropriate, personalized work experience is attached on the work-based learning template. Additionally, a summarized version of experiences provided is included below:

Proposed Work-Based Education for Students

Mitchell Engineering will provide students with engineering work-based training and experience, which consists of mapping with a variety of mapping programs including AutoCAD, staking surveys with both aerial and buried construction techniques, and verification and mapping of existing plants.

Our MET pathway aligns with the Engineering program of study provided by TEA. This leads to high-wage occupations such as mechanical drafters (median wage: \$57,096), electro-mechanical technicians (median wage: \$56,555), industrial machinery mechanics (median wage: \$49,816), industrial engineers (median wage \$97,074), and cost estimators (median wage: \$63,939). According to Workforce Solutions East Texas Board, the following are targeted and high demand occupations for the area: SOC#15-0399-Electrical and Electronic Engineering Technicians, SOC#15-0403-Electromechanical Technology/Engineering, SOC#15-0612-Industrial Technology/Technician, and SOC#15-0613- Manufacturing Engineering Technology/Technician.

Mitchell Engineering was excited to partner with us to offer our students hands-on work-based learning experiences. They currently are having difficulty finding workers to fill open positions and find our partnership to be very valuable in filling future workforce needs for their company. In addition, Mitchell Engineering will be offering priority in interviewing for qualified students graduating from the program.

Awareness Activities:

Activity #1- Host guest speakers from Mitchell Engineering and a local airport to explain more about their industry and provide further information on the work they do each day

Activity #2- Presentations highlighting careers and jobs that can be pursued after completion of ICIA certifications and/or an AAS in Mechanical Engineering Technology or an AAS in Information Systems Support and Administration or an FAA drone pilot's license

Activity #3-Visits to Mitchell Engineering worksites and the local airport to see where the work is being done and familiarize themselves with the work environment for that field

Activity #4- An engineering professional employed with Mitchell Engineering that has experience in varied sectors of the engineering profession will come and speak to students about other types of engineering (chemical and technological)

Exploration Activities:

Activity #5- Students will have the opportunity to do job shadowing in the mechanical engineering technology field

Activity #6- An engineer employed with Mitchell Engineering will serve as a job mentor to students in the pathway. This will provide students with an engineering professional to answer career-related questions.

Preparation Activities:

Activity #7- Mitchell Engineering has offered the opportunity of paid internships to qualified mechanical engineering technology students. They are even offering two paid internships for interested students this summer.

TEA Program Requirements

1. Grantee must establish a Leadership Team. Describe the current Leadership Team. Include a list of the individuals and their titles, along with how often the Leadership Team will meet, the dates of meetings that have already been held, any upcoming meetings and agenda topics.

The Fruitvale ICIA Leadership Team was established in the spring of 2018 and has been meeting routinely to evaluate data, consider courses of action, made decisions, and work toward satisfying the benchmarks in the ICIA blueprint. The current Leadership Team consists of:

- Rebecca Bain, Fruitvale ISD Superintendent- 15 years of grant writing and grant management experience
- Susan McCann, Fruitvale ISD Business Manager- 20+ years of grant financial management
- Wendy Milam, Fruitvale ISD New Business Manager
- Angela Clark, Fruitvale ISD Curriculum Director
- Charles Harford, Fruitvale High School Principal
- Amanda Masterson, Fruitvale High School Counselor

The Leadership Team will continue to meet on a monthly basis (or sooner when necessary). Meetings have been previously held on the following dates:

April 27, 2018, June 28, 2018, September 12, 2018, September 17, 2018, October 26, 2018, November 15, 2018, December 13, 2018, March 1, 2019, and March 4, 2019

We currently have an upcoming Leadership Meeting scheduled for April 26, 2019, where we will finalize summer bridge "Bobcat Academy", solidify work-based learning dates for fall 19-20 (speaker dates, job site visits, job shadowing), discuss teacher externship opportunities for the summer, and solidify our ICIA pathway retention plan.

2. Grantee must develop wrap-around strategies and services involving multiple stakeholders (parents, teachers, counselors, community members, etc.) to strengthen both the academic and social/emotional skills and support necessary for high school and college readiness, as well as provide academic and social/emotional support for students to be successful in rigorous academic and work-based educational experiences. Describe the current wrap-around strategies and services the school is offering, as well as the additional strategies and services that are planned to support P-TECH.

Fruitvale High School currently provides students with academic tutorial opportunities before and after school as well as built into the day during advisory period. The Fruitvale ICIA plans to utilize grant funds to add an ICIA project director who can also serve to provide students with academic, career, and pathway counseling. This counselor will be available solely to our ICIA students to meet their career and academic counseling needs. Currently, all Fruitvale High School students have a teacher mentor that they meet with during advisory. Our students entering the ICIA will also be assigned a CTE teacher as a mentor to help them navigate the challenges they undertake college classes. The IHE advisor will be available to advise students of requirements to continue their education after high school and ensure transferability of credits. We also realize the particular importance of students beginning their college careers in high school and the challenges that come along with that.. By providing our ICIA an academic counselor, this will allow our current high school counselor to focus on students social-emotional well being. We also are looking to purchase a counseling program to better equip our students from PK-12 with resiliency and character growth strategies. Fruitvale High School is small and therefore administration, teachers, and counselors know each student and are in-step with student needs. The school and parent bond will of course continue to be vital to student success. Fisd recognizes the importance of this and will continue to discover innovative ways to strengthen communication with parents and families to better assess student social emotional well-being and give support to the student as needed.

As a district, we also value the importance of preparing students by utilizing an employability rubric that the district created. The 2019-2020 school year will be the third full year that students have been immersed in learning such valuable skills as communication, collaboration, critical thinking, problem-solving, initiative, punctuality, work ethic, resiliency, and moral ethics. Each Thursday, teachers on both the junior high and high school campuses provide real-world engaging lessons on these skills. Students keep their own growth on each particular skill.

Request for Grant Funds

List all of the allowable grant-related activities for which you are requesting grant funds. Include the amounts budgeted for each activity. Group similar activities and costs together under the appropriate heading. During negotiation, you will be required to budget your planned expenditures on a separate attachment provided by TEA.

PAYROLL COSTS - 6100 (include direct program and direct admin costs)	BUDGET
Project Director/Career Counselor	100,000
SolidWorks Instructor	40,000
Extra Duty Pay/Stipends	8,800

PROFESSIONAL AND CONTRACTED SERVICES - 6200 (include direct program and direct admin costs)	BUDGET

SUPPLIES AND MATERIALS - 6300 (include direct program and direct admin costs)	BUDGET
Other Materials (such as curricular materials)	36,200

OTHER OPERATING COSTS - 6400 (include direct program and direct admin costs)	BUDGET
Student field trips	10,000
Travel to ICIA/P-TECH conferences	5,000

CAPITAL OUTLAY - 6500 (include direct program and direct admin costs)	BUDGET

Total Direct Costs

Indirect Costs

TOTAL BUDGET REQUEST (Direct Program Costs + Direct Admin Costs + Indirect Costs)

REQUIRED MATCH AMOUNT (total budget request x 20%)

ATTACHMENT #1: 2019-2021 P-TECH AND ICIA SUCCESS GRANT PROGRAM

Crosswalk Template

You may delete or expand rows but do not exceed one page

CDN: 234-909

Program of Study	IHE Partner	Program Offered in 2018-2019? (Y/N)	Expected Program Student Outcomes
Mechanical Engineering Technology (MET)	Trinity Valley Community College	N	Multiple certification opportunities and/or an associate's degree and/or 60 credit hours of college coursework

Year / Grade Level	High School Course			Post-Secondary Course			
	PEIMS Course/Code #	High School Course Name	High School Credits	Texas Common Course Numbering System Number	College Course Name	College Credit Hours	
Year 1 / Grade 9	03220100	English I	1				
Year 1 / Grade 9	03010200	Biology I	1				
Year 1 / Grade 9	03100500	Algebra I	1				
Year 1 / Grade 9	PESS00000	Physical Education	1				
Year 1 / Grade 9	03500100	Fine Art	1				
Year 1 / Grade 9	03580200	Comp. Science I (For. Lang.)	1				
Year 1 / Grade 9	13011400	Business Information Management I	0.5	BCIS 1305	Business Computer Applications	3	
Year 1 / Grade 9	03270100	College Readiness & Study Skills	0.5	EDUC 1300	Learning Framework	3	
Year 1 / Grade 9	13036200	Principles of Applied Engineering	1				
Total Year 1 High School Credits			8	Total Year 1 College Credit Hours			6
Year 2/ Grade 10	03220200	English II	1				
Year 2/ Grade 10	03100700	Geometry	1				
Year 2/ Grade 10	03040000	Chemistry	1				
Year 2/ Grade 10	03340400	World History	1				
Year 2/ Grade 10	03580300	Comp. Science II (For. Lang.)	1				
Year 2/ Grade 10	13036500	Engineering Design and Presentation I	0.5	DFTG 1357	Specialized Intermediate Computer-Aided Drafting	3	
Year 2/ Grade 10	13004600	Architectural Design I	0.5	DFTG 1333	Mechanical Drafting	3	
Total Year 2 High School Credits			6	Total Year 2 College Credit Hours			6
Year 3/Grade 11 SUMMER	N1270153	General Employability Skills	1	POFT 1120	Job Search Skills	3	
Year 3/Grade 11	03220300	English III	1	English 1301	English Composition I	3	
Year 3/Grade 11				English 1302	English Composition II	3	
Year 3/Grade 11	03100600	Advanced Math- Algebra II	1				
Year 3/Grade 11	03050000	Physics	1	PHYS 1401	College Physics I	3	
Year 3/Grade 11				PHYS 1402	College Physics II	3	
Year 3/Grade 11	03340100	US History	1	HIST 1301	United States History I	3	
Year 3/Grade 11				HIST 1302	United States History II	3	
Year 3/Grade 11	13032200	Principles of Manufacturing	0.5	MCHN 1320	Precision Tools and Measurement	3	
Year 3/Grade 11	13032900	Manufacturing Engineering Technology I	0.5	MCHN 2344	Computerized Numerical Control Programming	3	
Total Year 3 High School Credits			6	Total Year 3 College Credit Hours			27
Year 4/Grade 12	03220400	English IV	1	ENGL 2322	British Literature I	3	
Year 4/Grade 12				ENGL 2323	British Literature II	3	
Year 4/Grade 12	13018000	Financial Math	1	MATH 1314	College Algebra	3	
Year 4/Grade 12	03330100	Government	0.5	GOVT 2305	Federal Government	3	
Year 4/Grade 12	03310300	Economics	0.5	ECON 2301	Principles of Macroeconomics	3	
Year 4/Grade 12	13032500	Precision Metal Manufacturing I	0.5	MCHN 1338	Basic Machine Shop I	3	
Year 4/Grade 12	13004700	Architectural Design II	0.5	INMT 1343	Computer Aided Design/Computer Aided Manufacturing	3	
Year 4/Grade 12	13032600	Precision Metal Manufacturing II	0.5	MCHN 2341	Advanced Machining I	3	
Year 4/Grade 12	13032950	Manufacturing Engineering Technology II	0.5	MCHN 2335	Advanced CNC Machining	3	
Year 4/Grade 12	13033000	Practicum In Manufacturing	0.5	MCHN 1480	Cooperative Education- Machine Tool Technology/Machinist	3	
Total Year 4-5 High School Credits			5.5	Total Year 4-5 College Credit Hours			30
Total High School Credits			25.5	Total College Credit Hours			69
Certification (s) to be earned by high school graduation:		SolidWorks CSWA, Occupational Skill Award (TVCC), 10 hour OSHA certification, Machining Certificate (TVCC), CAD/CAM-CNC Certificate (TVCC)					
Degree (s) to be earned by high school graduation:		AAS in Mechanical Engineering Technology					

ATTACHMENT #2: 2019-2021 P-TECH AND ICIA SUCCESS GRANT PROGRAM WORK-BASED EDUCATION MATRIX TEMPLATE

Work-based education is an educational strategy that provides students with real-life work experiences where they can apply academic and technical skills and develop employability skills. Work-based education experiences for the P-TECH program should be provided at every grade level and should be appropriate in scope for the age of the student. Examples of work-based learning experiences are: job shadowing, cooperative education, career mentoring, internships, apprenticeships and can be paid or unpaid.

Please complete the chart below with at least 3 examples of work-based learning that your program provides to students at each grade level.

You may delete or expand rows but do not exceed one page

Year / Grade Level	Work-based Education Example # 1			Work-based Education Example # 2			Work-based Education Example # 3		
	Work-based Education Example #1	Type of Activity	Business Partner	Work-based Education Example #2	Type of Activity	Business Partner	Work-based Education Example #3	Type of Activity	Business Partner
Year 1 / Grade 9	Career Fair	Awareness	Multiple local businesses	Guest Speaker	Awareness	Mitchell Engineering; TVCC	College Visits	Awareness	TVCC
Year 2 / Grade 10	Work Site Tour	Exploration	Mitchell Engineering	Job Shadowing	Exploration	Mitchell Engineering	College Visits	Awareness	Local Engineering Colleges
Year 3 / Grade 11	Job Mentoring	Exploration	Mitchell Engineering	Job Shadowing	Exploration	Mitchell Engineering	SolidWorks CSWA Credential Attainment	Preparation	TVCC
Year 4 / Grade 12	Practicum-Paid Internship	Preparation	Mitchell Engineering	Job Mentoring	Exploration	Mitchell Engineering	Certificate Attainment	Preparation	TVCC
Optional Year 5	Practicum-Paid Internship	Preparation	Mitchell Engineering	Job Mentoring	Exploration	Mitchell Engineering	Certificate Attainment	Preparation	TVCC

CDN: 234-909



MEMORANDUM OF UNDERSTANDING
PATHWAYS IN TECHNOLOGY (P-TECH) EARLY
COLLEGE HIGH SCHOOL and INDUSTRY CLUSTER
INNOVATIVE ACADEMIES (ICIA)

A Memorandum of Understanding (MOU) among Trinity Valley Community College (TVCC) and Fruitvale Independent School District (ISD) (herein called the partners) for the creation of the PATHWAYS IN TECHNOLOGY EARLY COLLEGE HIGH SCHOOL and INDUSTRY CLUSTER INNOVATIVE ACADEMIES (P-TECH ECHS/ICIA).

PURPOSE AND BACKGROUND

The purpose of this agreement is to outline the collaboration of the partners, as listed above, in creating a future new four-year high school called Pathways in Technology Early College High School and Industry Cluster Innovative Academies (P-TECH ECHS/ICIA). This agreement is a conditional agreement developed for the purpose of the P-TECH ECHS/ICIA. The future P-TECH ECHS/ICIA will enable students in Grade 9, 10, 11, or 12 who are at-risk of dropping out, as defined by the TEC, §29.081, or who wish to accelerate completion of high school to combine high school courses and college-level courses. This opportunity will provide a smooth transitional experience for students to receive a high school diploma, a work credential, an associate degree, and work-based education programs on or before the sixth anniversary of a student's first day of high school. At the conclusion of the P-TECH ECHS/ICIA program, there will be an opportunity for students to receive priority in interviewing with collaborating employers.

TERM

The terms of this agreement shall represent an ongoing commitment between the two parties. This agreement will be evaluated annually, and changes may be made with the agreement of both parties.

STUDENT ELIGIBILITY

High school students must meet all eligibility requirements set forth in the THECB Rules. All eligibility requirements set forth herein are subject to the THECB Rules and, in the event of conflict, the THECB Rules govern and apply.

To be eligible for enrollment in dual credit courses offered, students must be enrolled as a high school student. Academic eligibility requirements include demonstration of college readiness as evidenced by achieving the minimum passing standards of the Texas Success Initiative (TSI) as outlined in TAC 19, Part 1, Chapter 4, Subchapter C, §4.57 and TAC 19, Part 1, Chapter 4 Subchapter D, §4.85.

GRADING PERIODS AND POLICIES

P-TECH ECHS/ICIA will run a 6-week grading cycle where progress reports will be sent home to parents at 3-week intervals with a report card sent home at the end of each six weeks.

TVCC will report a number grade and letter grade to P-TECH ECHS/ICIA. P-TECH ECHS/ICIA will follow the ISD Grading Policy for high school courses taught at P-TECH ECHS/ICIA. P-TECH ECHS/ICIA will follow ISD rank and GPA policy.

P-TECH ECHS/ICIA will follow the TVCC policies regarding make up work and/or late work for all college courses taken for dual credit by P-TECH ECHS/ICIA students.

TVCC grades will post in the same semester in which they are earned.

COURSES OF STUDY AND CURRICULUM ALIGNMENT

All P-TECH ECHS/ICIA students will complete the foundation graduation plan required for high school graduation. TVCC will provide access to all P-TECH ECHS/ICIA students, courses in the workforce education programs, as well as the Core 42-hour curriculum. For all college courses offered for dual credit, TVCC will provide current course descriptions and syllabi as requested by P-TECH ECHS/ICIA staff and/or students. P-TECH ECHS/ICIA will be responsible for ensuring alignment between Texas Education Knowledge and Skills (TEKS) and college course objectives in order to grant dual credit.

An articulated four-year curriculum (grades 9 – 12) has been developed that meets and exceeds the TEKS to provide a seamless transition from grade level to grade level and allow students to transition from sheltered dual credit classes in grades 9 and 10 to full integration in TVCC classes by grade 11. The curriculum represents advanced level coursework. Within this framework, students will be able to earn a high school diploma within a four-year period and 60 credit hours towards an associate's degree, technical certification, and/or baccalaureate degree.

The defined sequence of courses for an Associate of Applied Science (AAS) degree in Mechanical Engineering Technology and Information Systems Support and Administration is contained within the TVCC approved core curriculum:

	FA LL	SPRING
Year One (9th grade)	BCIS 1305 (3 SCH)	EDUC/PSYC 1300 (3 SCH)
Year Two (10th grade)	ARTS 1301/DRAM 1310 MUSI 1306 (3 SCH)	SPCH 1315 (3 SCH)
Year Three (11th grade)	ENGL 1301 (3 SCH)	ENGL 1302 (3 SCH)
	HIST 1301 (3 SCH)	HIST 1302 (3 SCH)
	BIOL 1406/BIOL 1408 (4 SCH)	BIOL 1407/BIOL 1409 (4 SCH)

with the performance of any subcontract let under this agreement, and from any and all claims and losses accruing or resulting to any person, firm, or corporation who may be injured or damaged by the acts of omissions of the other party in the performance of subcontract.

MODIFICATION OF THE AGREEMENT

This Memorandum of Understanding may be modified and amended only by mutual agreement of the parties in writing, and any such modification or amendments shall be attached and become a part of this collaboration as if set forth herein.

TERMINATION OF THE AGREEMENT

TVCC and the ISD reserve the right to terminate this MOU upon service of written notice to the other party 90 days prior to the date of termination. In this event, the date of termination will be the day after the end of the semester during which the 90-day period expires.

BUDGET

The budget has been prepared by the ISD.

IN WITNESS WHEREOF, the partners hereto have executed this Memorandum of Understanding as of the year and day indicated:

Rebecca Ban
Superintendent

Date 11/8/2019

IN WITNESS WHEREOF, the partners hereto have executed this Memorandum of Understanding as of the year and day indicated:

Jerry King
Dr. Jerry King, President

Date 1/5/18

PARTNERSHIP MEMORANDUM OF AGREEMENT

This Agreement ("Agreement") for the development, support, and operation of a grades 9 through 13 early college and career preparatory school is effective as of November 15, 2018, by and between the Fruitvale Independent school District, with campus, Fruitvale High School, located at 141 VZCR 1901, Fruitvale, Texas 75127; and Mitchell Engineering with its principal office located at 400 N. 4th Street, Wills Point, Texas 75169. (Each ICIA 9-14 Partner is referred to herein individually as a "Party" and collectively as the "Parties".)

WHEREAS, Fruitvale Independent school District and Mitchell Engineering wish to enter into an agreement to set forth their continuing rights and obligations with respect to the development, support, and operation of the Fruitvale High School school Industry Cluster Innovative Academy (Fruitvale ICIA);

NOW THEREFORE, in consideration of the mutual promises set forth herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

I. OVERALL SCHOOL MODEL

The Parties agree to collaborate in developing, supporting, and operating the Fruitvale ICIA. The school's mission is to provide all students with an education that begins in grade 9, continues through high school completion with a high school diploma and certifications, and could culminate in attainment of an associate degree in Mechanical Engineering Technology, thus preparing students to succeed in college and career. The program also includes authentic work experiences designed to prepare students for positions in the Mechanical Engineering Technology field.

The school is open to students of all backgrounds and abilities, including struggling learners, English language learners, and students with disabilities. The point of entry into the program can be from grades 9-12.

The school's curriculum and support program is designed to support a wide range of students in earning a high school diploma, possibly an associate degree, and the work experience needed to be a highly qualified candidate for career-track employment in the Mechanical Engineering Technology field. All college courses offered to students while enrolled in the school will be free of charge to students and their families.

The Parties will work together to develop, evaluate and revise the school's scope & sequence plan, which will identify specific high school and college courses and work experiences that students will participate in each year as part of their regular school program. This scope & sequence plan will serve as a blueprint for curriculum development and programming for students and staff.

II. GOVERNANCE

Fruitvale Independent school District (ISD) is a public school and, as such, must follow all policies and procedures outlined in Fruitvale ISD's Policies & Procedures. The principal of the school is responsible for day-to-day decisions regarding the operation and management of the school. The principal is a Fruitvale ISD employee, and the selection of the principal is governed by Fruitvale ISD's Policies & Procedures. According to Fruitvale ISD policy, the principal will be supervised by the district superintendent.

An advisory board consisting of representatives from the above named Parties, along with a representative from the Higher Education Partner, shall oversee the development and provide ongoing support of the ICIA. Additional staff and faculty members, students and parents may be added as appropriate.

The advisory board shall meet at least four times a year and as often as needed to evaluate instructional and programmatic activities, identify problems, address issues and challenges that arise, and make recommendations regarding more effective coordination and collaboration. The Advisory Board shall address the ICIA's scope & sequence plan, the overall quality and outcomes from the college courses, other aspects of the ICIA, and other issues related to relationship between the Parties. The Advisory Board is empowered to suggest revisions to this Agreement on matters of the ICIA's program focus.

III. ROLES AND RESPONSIBILITIES

A. Mitchell Engineering Responsibilities:

1. Mitchell Engineering will be committed to the full implementation of the overall school model as outlined in Section 1.
2. Mitchell Engineering will ensure that every participating student receives mentoring from an engineering professional, including an opportunity to communicate in writing or online, and to engage in face-to-face interactions on at least two occasions per year.
3. Mitchell Engineering will identify the appropriate entry-level positions students at the ICIA may qualify for upon graduation, work with the ICIA to map the key skills needed to succeed in those positions, and strongly consider students at the ICIA for those employment opportunities.
4. Mitchell Engineering will help define and provide opportunities for appropriate workplace experiences (e.g., design projects, visits, speakers, internships, and apprenticeships) to prepare students for the world of work based on the curriculum scope & sequence plan.
5. Mitchell Engineering will work with the ICIA's staff to develop a coherent scope & sequence plan of courses and workplace experiences that enables students to successfully meet the goals outlined in the program model. Employer will help identify high-quality occupation-related projects and curriculum that may be incorporated into the academic program.
6. Mitchell Engineering will allow Fruitvale High School ICIA and the ICIA's staff and students appropriate access to Mitchell Engineering's facilities to support program activities, including, but not limited to, internships, job shadowing, mentoring, and other "real-life" work experiences for students.

B. Fruitvale Independent school District Responsibilities:

1. Fruitvale ISD will be committed to the full implementation of the Overall school Model as outlined in Section I.
2. Fruitvale ISD will work with the ICIA's staff to develop a seamless and coherent scope & sequence plan of courses and workplace experiences that enables students to successfully meet the goals outlined in the

race, color, religion, sex, age, marital status, veteran status, handicap, disability, national origin or sexual orientation, genetic predisposition, or carrier status. Each Party shall promptly notify the other Party of any complaint of discrimination made to it by any person in connection with the subject matter of this Agreement.

- C. Student Records. All information about students obtained from any of the Parties shall be held confidential pursuant to the provisions of the Family Educational Rights and Privacy Act (20 USCA. 1232g) ("FERPA").
- D. Independent Contractors. The Parties intend to create an independent contractor relationship. No provision of this Agreement, nor any action taken by or arrangement entered into between or among the Parties in accordance with the provisions hereof, shall be construed as or deemed to make any Party the partner, joint venturer, principal, agent or employee of another Party. No director, trustee, officer, partner, employee, agent, affiliate or contractor of any Party shall be deemed to be an employee, agent or contractor of another Party. No Party shall have any right, power, or authority, express or implied, to bind another Party to any individual or organization that is not a Party to this Agreement.
- E. Expenses. Except as otherwise expressly provided in this Agreement, each Party will bear its own costs and expenses (including legal fees and expenses) incurred in connection with this Agreement and the activities contemplated herein.
- F. Assignment. The provisions of this Agreement shall bind and inure to the successors and assigns of the respective Parties. No Party may assign its rights or obligations herein without the prior written consent of the other Party.
- G. No Third-Party Beneficiaries. This Agreement shall not confer any rights or remedies upon any person other than the Parties and their respective successors and permitted assigns.
- H. Notices. All notices to any Party required or desired to be given hereunder shall be in writing and shall be sent by hand delivery or overnight courier to the address set forth above or such other address as such Party may hereafter specify for that purpose by notice to the other Party. Any notice shall be deemed to have been given on the date of its actual receipt.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date of the last signature following.

Fruitvale ISD

Mitchell Engineering

By: Rebecca Bain
Rebecca Bain
Superintendent
Fruitvale ISD

By: Brian Miller
President
Mitchell Engineering

Date: November 15, 2018

Date: November 15, 2018

Workforce Solutions East Texas Board Targeted and High Demand Occupations

SOC Code Occupation	CIP Code Instructional Program
17-3023 Electrical and Electronic Engineering Technicians	15.0303 Electrical, Electronic and Communications Engineering Technology/Technician 15.0305 Telecommunications Technology/Technician 15.0306 Integrated Circuit Design 15.0399 Electrical and Electronic Engineering Technologies/Technicians, Other 15.0616 Semiconductor Manufacturing Technology 15.1201 Computer Engineering Technology/Technician 15.1202 Computer Technology/Computer Systems Technology
17-3024 Electro-Mechanical Technicians	15.0403 Electromechanical Technology/Electromechanical Engineering 15.0404 Instrumentation Technology/Technician 15.0405 Robotics Technology/Technician 15.0406 Automation Engineer Technology/Technician 15.0499 Electromechanical and Instrumentation and Maintenance Technologies/Technicians
17-3026 Industrial Engineering Technicians	15.0612 Industrial Technology/Technician 15.0613 Manufacturing Engineering Technology/Technician 15.0699 Industrial Production Technologies/Technicians, Other 15.1501 Engineering/Industrial Management 15.1503 Packaging Science 41.0303 Chemical Process Technology

This Information is supplied by the Workforce Solutions East Texas Board as requested by Fruitvale ISD.


 Signature

Douglas G. Shryock
 Director, Regional Workforce and Economic Development
 Workforce Solutions East Texas Board

4/2/19
 Date