



**2022-2024 Advanced Placement (AP) Computer Science Principles (CSP) Grant  
Letter of Interest (LOI) Application Due 11:59 p.m. CT, July 12, 2022**

NOGA ID [Redacted]

Authorizing legislation **General Appropriations Act, Article III, Rider 86, 87th Texas Legislature**

This LOI application must be submitted via email to [competitivegrants@tea.texas.gov](mailto:competitivegrants@tea.texas.gov).  
The LOI application may be signed with a digital ID or it may be signed by hand. Both forms of signature are acceptable.  
TEA must receive the application by **11:59 p.m. CT, July 12, 2022**.

Application stamp-in date and time

Grant period from **August 31, 2022 to April 30, 2024**

Pre-award costs are **not** permitted for this grant.

**Required Attachments**

- Excel workbook with the grant's budget schedules (linked along with this form on the TEA Grants Opportunities page)

**Amendment Number**

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

**Applicant Information**

Organization Mercedes ISD CDN 108907 Campus Mercedes HS ESC 1 UEI # 08954337

Address 206 West 6th Street City Mercedes ZIP 78570 Vendor ID 1746001718

Primary Contact Deborah Rabel Email deborah.rabel@misdtx.net Phone 956-514-2100

Secondary Contact Ricardo Hinojosa Email ricardo.hinojosa@misdtx.net Phone 956-514-2100

**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 LOI application, as applicable, and that these documents are incorporated by reference as part of the LOI application and Notice of Grant Award (NOGA):

- LOI application, guidelines, and instructions
- Debarment and Suspension Certification
- General and application-specific Provisions and Assurances
- Lobbying Certification

Authorized Official Name Dr. Richard Rivera Title Interim Superintendent

Email RICHARD.RIVERA@misdtx.net Phone 956-514-2022

Signature *Richard Rivera* Date 7-12-2022

**Shared Services Arrangements** Shared services arrangements (SSAs) are **not** permitted for this grant.**Statutory/Program Assurances**

The following assurances apply to this program. In order to meet the requirements of the program, the applicant must comply with these assurances.

Check each of the following boxes to indicate your compliance.

- 1. 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.
- 2. The applicant provides assurance to adhere to all the Statutory and TEA Program requirements as noted in the 2022-2024 Advanced Placement (AP) Computer Science Principles (CSP) Grant Program Guidelines.
- 3. The applicant provides assurance to adhere to all the Performance Measures, as noted in the 2022-2024 Advanced Placement (AP) Computer Science Principles (CSP) Grant Program Guidelines, and shall provide to TEA, upon request, any performance data necessary to assess the success of the program.
- 4. The applicant will include AP CSP as part of the course catalog for the 2023-2024 school year by December 2022 and will go through the necessary district policies to obtain school board approval.
- 5. The applicant will identify, recruit, and onboard qualified teachers to receive professional development training and become certified to teach an AP CSP course.
- 6. The applicant will identify and select a professional development provider.
- 7. The applicant will promote the AP CSP course offering to all students.
- 8. The applicant will provide support necessary to ensure students successfully pass the AP CSP course.
- 9. The applicant will provide a way for students to take the AP CSP exam after course completion for free or at a reduced cost.

**Summary of Program**

Provide an overview of the program to be implemented with grant funds. Include the overall mission and specific needs of the organization. Describe how the program will address the mission and needs.

The Mercedes ISD Career and Technical Education (CTE) department is striving to offer students various programs of studies that are aligned to the Regional Labor Market high-demand, high-wage jobs that are currently needing to be filled. According to the " Lower Rio Grande Valley Workforce Development Area (23) Labor Market Information, 2020 - 2030" information, careers in Cybersecurity, which falls within the STEM endorsement and Career Cluster are one of those careers that are in high demand for the region. The opportunity for this grant will allow us to implement and strengthen the Cybersecurity Program of Study by offering the Level 2 - 4 courses associated with Cybersecurity; Mercedes ISD CTE currently offers the Level 1 Courses (Principles of IT and Fundamentals of Computer Science).

Through this grant and the funds secured, it would ensure that Mercedes ISD CTE meets its mission of " Providing the students of Mercedes and surrounding areas various opportunities to learn specialized skills in various programs of studies that will ensure they are college, career, and military ready."

**TEA Program Requirements**

1. Identify and describe the explicit need for grant funds to support an AP Computer Science Principles (AP CSP) course. How will this grant build capacity for the LEA? How will the LEA prioritize marginalized students in receiving access to the AP CSP course offering?

Through this grant, the funds secured would allow the district to send staff to the appropriate AP Professional Development offered, allow them to become certified and gain the needed knowledge and expertise to correctly and successfully implement the courses required to complete the Cybersecurity Program of Study. In addition, the funds would ensure that all required materials and resources needed to effectively teach the course are acquired so students have the hands-on experience for the application of concepts learned in the courses offered.

This grant will also allow us to build capacity with our selected staff members via the extensive knowledge gained by attending the rigorous professional development training offered. As time progresses, the staff will be sent to additional professional development to stay abreast of any changes or updates in Cybersecurity, which is constantly evolving and advancing to meet the needs of society.

Mercedes ISD serves many underrepresented student populations and by offering this program of study, we are ensuring that these students will have access to this opportunity. Students in specialized student demographics (special education, emergent bilingual, girls (underrepresented in STEM careers), at-risk, economically disadvantaged, etc...) will be made aware of this opportunity as early as the middle school grade levels and will be encouraged to take part in this opportunity.



**TEA Program Requirements Cont'd**

2. Describe how the LEA will select teachers to receive professional development to teach an AP CSP course. How will the LEA select teachers and ensure teacher commitment? How will the LEA ensure teachers have all the tools necessary to teach the AP CSP course successfully? Include how many teachers the LEA needs to provide the AP CSP course.

First and foremost, we will prioritize the teachers that currently teach the Level 1 courses - Principles of Information Technology and Fundamentals of Computer Science since these teachers are certified to teach these courses. The teacher who currently teaches Fundamentals of Computer Science has shown a great interest in continuing to teach additional and advanced computer science courses so this works in the favor of building our Cybersecurity program. This teacher currently obtains certifications in Secondary Computer Information Systems and Secondary Mathematics. At this time, this is the only teacher that will be offering the Computer Science courses. Mercedes ISD will ensure that we provide the appropriate professional development training, adopt a proven curriculum, and ensure that all the required and recommended equipment, materials, and resources are secured.

3. The LEA will identify and select a professional development provider. Describe the nature of the LEA/provider relationship. Which vendor will be the professional development provider for the LEA? When and how will this training occur?

Since the grant is for Advanced Placement (AP) Computer Science, we will strongly consider professional development with AP College Board, Region 1 or any other ESC and/or in the state of Texas, and the Texas Industrial Vocational Association (TIVA) conferences. Mercedes ISD will actively search for providers that offer proven and effective curriculum and outcomes. The expectation is that the provider will provide materials, resources, ongoing support and training, and a comprehensive list of all materials and resources needed for the courses. In addition, it is imperative that the provider supports the teacher with possible industry-based certifications and possible college credit hours that may be obtained through these courses. The ideal time frame is for the training to occur towards the end of the Spring semester (2023) and into the Summer (2023) so there is adequate time for the teacher to attend the summer professional development training and time to ensure that they become familiar with the curriculum and begin with lesson planning. The LEA also needs to ensure that the courses are properly scheduled into the master schedule and all materials and resources are ordered with sufficient time to ensure arrival prior to the start of the school year.

**TEA Program Requirements Cont'd**

4. Describe the course curriculum for classroom instruction. List any curriculum, technology, and/or equipment required for the course.

Mercedes ISD CTE will actively search and obtain a proven and successful curriculum to utilize for the Cybersecurity program of study. Curricula will include AP College Board and use of Code.org CS Principals curriculum that will support students and teachers new to the discipline. Mercedes HS and CTE will provide 1:1 computing access and an on-site wifi connection for learning during the school day so there are no immediate equipment needs for the course. The classroom will be set up with student desktop computers and all the accessories and software needed to make the courses successful. The teacher will be provided with an updated teacher desktop and/or laptop computer if needed.

5. Describe how students will be supported in selecting and succeeding in the AP CSP course. How does this course support the student's program of study or graduation plan? The LEA must include a plan for ensuring that students take and pass the AP CSP exam.

Starting at the middle school level, students will be introduced to the different career clusters and programs of studies that are offered at the high school level, including the Cybersecurity Program of Study and its coherent sequence of courses, which includes the Computer Science courses. Additionally, this will support the student's program of study and graduation plan. In house tutorials by the AP Computer Science teacher will be provided to the students throughout the course of the year.

**TEA Program Requirements Cont'd**

6. Describe the course evaluation procedure and outline student success measures. Describe how the LEA will ensure successful grant administration by measuring the following metrics: (a) Increase in the number of CTE completers taking an AP course; (b) Increase in participation and/or performance of students taking and/or passing the AP CSP exam; and (c) Increase in number of special populations and non-traditional students enrolled in an AP CSP course.

Upon receiving the grant, the first cohort of students will be documented as they proceed through the program of study. Special emphasis will be placed on serving students who are underrepresented in the area of Cybersecurity/Computer Science; students will be HIGHLY ENCOURAGED to take part in the program of study, regardless of learning abilities, socioeconomic status, and gender. To ensure success, students who have an IAP or IEP will be closely monitored to ensure they are on track and their case managers, Computer Science teacher, and counselors will be attentive to their progress and ensure they are provided with all the interventions and support needed for them to be successful.

As the students progress through the coherent sequence of courses, the students will be provided with support to ensure they are successful and provide counseling and advisor support to ensure they are progressing through the program of study. At the end of each course, students will be required to take a survey of the course and provide feedback that can be used to address any areas of concern and ensure improvements are made. As the students take the courses, they will be challenged with meaningful and rigorous instruction, preparing them for the upper level courses where they will be encouraged to take AP Computer Science courses and with the proper classroom and instructional strategies and interventions, students will challenge the AP CSP exam and be successful.

7. Describe how the LEA plans to implement and sustain the AP CSP course at each campus and how the course will continued to be offered beyond the grant.

During the period of the grant, it will be a priority to recruit as many students into the program as possible. The more students that are enrolled in the program of study, the more funds will be generated through CTE, especially if the students are completers and are in Level 3 and Level 4 courses. At the onset of the grant, all initial costs - professional development, equipment, materials, resources, set-up, etc. will be covered and after the grant has come to a completion, the expectation is that the program will be self-sustaining through CTE-generated funds for the program of study.

**Goals, Objectives and Strategies**

Describe the major goals/objectives of the proposed program. What activities/strategies will be implemented to meet those goals/objectives?

The overall goal is to recruit students and have them become completers in Cybersecurity (Computer Science) program of study and graduate with multiple endorsements, including STEM, as well as with an industry-based certification, dual enrollment hours, and hands-on experience so they are college and career ready for the high-demand and high-wage jobs in the Region. The Cybersecurity program of study will be advertised and promoted at the school level and exposure to the program as early as the elementary level. Students in the program will receive assistance from their teachers, counselors, college and career readiness advisor, and administrators who will guide them through the challenges and ensure their success in the program. In order to ensure that they remain interested and motivated in the program, scheduled speakers and industry partners from the Cybersecurity/Computer Science industry will be invited, as well as recruiters from local IHE's (institutions of higher education) to discuss their Cybersecurity programs, and Workforce Solutions to discuss local career opportunities and/or internships.

**Budget Narrative**

Describe how the proposed budget will meet the needs and goals of the program, including for staffing, supplies and materials, contracts, travel, etc. If applicable, include a high-level snapshot of funds currently allocated to similar programs. Include a short narrative describing how adjustments will be made in the future to meet needs.

Since the teacher in mind to teach the Computer Science courses also teaches math courses, the grant will help pay the salary of the teacher to teach the computer science courses so the high school can hire a math teacher in his place. As the number of students increases and the courses generate funding, the program and the salary of the teacher will be sustained by the CTE Department. In addition, stipends will be offered to the teacher to encourage a student organization that will actively participate in skills development and competitions. All supplies, materials, equipment, professional development, industry based certifications, student field trips to colleges/universities and business will be paid for through the grant.

**Per Teacher Budget**

- Teacher stipend to complete Code.org AP CS Principals Professional Learning Program: \$1,200
  - Code.org AP CS Principals Professional Learning Program registration fee: \$1,500
  - Teacher travel support: Coordinated by another federal grant
  - AP CS Principles student exam fees (12): \$1,200
  - Materials and print: \$331
  - Indirect Cost: \$769
- TOTAL BUDGET: \$5,000**



**Appendix I: Amendment Description and Purpose** (leave this section blank when completing the initial application for funding)

An amendment must be submitted when the program plan or budget is altered for the reasons described in the "When to Amend the Application" document posted on the [Administering a Grant](#) page. The following are required to be submitted for an amendment: (1) Page 1 of the application with updated contact information and current authorized official's signature and date, (2) Appendix I with changes identified and described, (3) all updated sections of the application or budget affected by the changes identified below, and, if applicable, (4) Amended Budget Request. Amendment instructions with more details can be found on the last tab of the budget template.

*You may duplicate this page*

**Amended Section**

**Reason for Amendment**