



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

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**.

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):

Applicant Information

Organization CDN Campus ESC UEI #

Address City ZIP Vendor ID

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 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 Title

Email Phone

Signature Date

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 mission of Castleberry ISD is to provide a positive learning environment that engages, mentors, and motivates all students to excel as successful lifelong learners. The Castleberry ISD CCMR CTE & Advanced Academics department is an innovative and career focused organization, whose purpose is to equip students to diligently pursue and obtain valuable rigor course work, industry based certifications and key work based learning experiences. Funding will serve to sustain program offerings, teacher growth, and student success.

Castleberry ISD Advanced Academics program contributes to creating a culture of intentional excellence through its commitment to all students who have the capability, potential or motivation to access advanced academic curriculum and instruction. Castleberry ISD has a STEM Academy starting in 6th grade with focus on Cybersecurity and computer programming. It also offers two STEM Pathways grades 9-12 for Programming and Software Development and Cybersecurity. Implementing AP Computer Science Principles in these two pathways will ensure students will encounter challenges and learn new skills. They will also gain confidence and develop real-world application along with essential college study habits. Encouraging students to enroll in an AP course earlier in the pathway will also encourage sustainability as we can look into offering the even higher level AP Computer Science A, pushing the educational boundaries of all the pathway completors.

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?

Castleberry ISD student population consist of 89% soci-econmic with 87% of students identifying as hispanic. Castleberry ISD has three desired outcomes: Increase student enrollment and course section offerings, having a passing rate of 50% of the AP Computer Science Principles Exam and increase the total number of females enrolled in AP Computer Science Principles. This will also ensure students graduate college and career ready with college credit passing scores. With more students completing AP Computer Science and eligible university course credit, students can also minimize college debt and increase college course completion.

The 2021-2022 School Year Castleberry High school had 60 students enrolled in fundamentals of computer science and 40 students in UT OnRamps computer science. Females are underrepresented with only 2% enrolled.

Castleberry ISD will be committed to sustainability of AP courses by ensuring and funding appropriate teacher continued professional development, and covering all advanced course cost along with AP exam fees.

Grant funds would help Castleberry identify students who receive AP potential marks in PSAT exams and increase course offerings in daily schedule. Provide teacher training and tutoring for students that would increase the likelihood of students passing the AP CPS exam. Grant funds would help add more complex computer science course offering such as AP Computer Science Principles. Ensuring we sustain the growth from grade level to grade with AP Computer Science growth into AP Computer Science A.

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.

The criteria used for selecting Ap instructors includes:

Minimum of 3 years experience teaching honors or pre-ap courses or a masters degree in the AP content area.

Offering stipends

Offering paid professional development.

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?

Castleberry will utilize Project Lead The Way as a professional development provider. Project Lead The Way immerses teachers in a hands-on, collaborative learning environment that challenges them to look at their classrooms in a new way. PLTW provides unparalleled classroom support and top-notch teacher preparation. Teachers take on the role of a student, engage in in-depth exploration of PLTW coursework, and gain invaluable experience to take back to their classrooms. PLTW provides teachers with comprehensive support and classroom resources. By utilizing online PLTW resources, teachers can connect and share experiences and expertise with fellow educators from across the nation who are teaching the same PLTW courses. Teacher can ask questions and comment, like, and bookmark posts in an online engaging, ondemand platform specific to PLTW. Additionally, teachers can share files and follow peers to stay connected and share insights, advice, and best practices. Professional development sessions occur in two week blocks spanning over 40 hours during the summer.

TEA Program Requirements Cont'd

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

PLTW use Python® as a primary tool for AP Computer Science Principles instruction. Students explore and become inspired by career paths that utilize computing, discover tools that foster creativity and collaboration, and use what they've learned to tackle challenges like app development and simulation. The course is endorsed by the College Board, giving students the opportunity to take the AP Computer Science Principles exam for college credit. It prepares students to move forward into more rigorous computer science courses such as AP Computer Science A.

Technology/Equipment Required for Student: A computing platform is required for each teacher and for each student taking a computer science course. A desktop or laptop is the preferred platform. Castleberry high school is equipped with two computer labs that meet computer specification requirements to implement the PLTW curriculum. Additional technology requirement, such as Venier Go Direct Wireless Probes for hands-on activities which are embedded in the PLTW curriculum, will need to be added for the program.

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.

Students are supported and prepared to succeed in Ap CSP course by having every 7th grader enrolled and complete computer science course with curriculum from Code.org (CS Discoveries). Graduation plans and CTE completion plans with stem endorsement are available: Cybersecurity and Computer Science pathway with industry certification in Microsoft Technology Associate (MTA) Introduction to Programming Using HTML and CSS Microsoft Technology Associate (MTA) Windows Operating System Fundamentals.

The planned high school offerings include Computer Science I, Computer Science II, Game programming and design, Digital Design and Media production, Digital Forensics, OnRamps Computer Science, and AP Computer Science.

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.

Course evaluation procedure plan:

Progress monitoring will determine to what extent professional development and curriculum enhance the student performances and outcomes.

Data collection to determine AP CSP Success.

AP exam scores 3 or better

Student enrollment

Student completion of AP CSP course with 75% or better

Planned Student Outcome:

Increase interest in student participation

Increase scores on AP CSP exam

Increase the number of students completing a CTE Pathway

Increase Special Education Participation through ARD course introduction, description, and committee decision.

Planned Teacher Outcome:

Increase the pedagogy instructional skills for teachers teaching Computer Science

Increase comfort in teaching AP Content

Increase instructional strategies in teaching Special populations

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.

Castleberry ISD plans to implement and sustain the AP CSP course by offering and developing offered pre-requisite courses such as Computer Technology Applications courses, Computer Science I, and Computer Science II.

Six teachers providing pre-requisite instruction leading up to AP CSP will allow Castleberry High School the opportunity to open multiple course offerings for AP CSP. Foundational course work provides student the opportunity to succeed and earning a passing score on the AP exam.

Beyond the grant, Castleberry will sustain the AP CSP by strengthening the course alignment pathway and success rate of AP CSP course completion and passing score. Sustaining professional development teachers began along with gathering and analyzing progress monitoring data each quarter to determine levels of success and plan for refinement of goals. An academic advisor will gather and analyze data to determine the effectiveness of the focused program for refinement and goals. The baseline will be identified first year of the grant funding allowing for adjustments in the spring identifying professional development to sustain program growth.

Goals, Objectives and Strategies

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

Major Goal:

Increase AP CSP participation and increase the passing score of 3 or better to at least 50%. Provide professional development to content teachers to improve instruction delivery and prepare students to real-world application or college credit opportunity.

Activities:

Project Lead the Way (PLTW) Python as a primary instructional tool. College Board classroom classroom for Big Idea collaborations. Tutoring and extended instruction through Khan Academy. Accelerated learning with after school/Saturday learning opportunities providing student with real-world application to learning content.

Strategies:

Students will meet individually with the school counselor to work on their graduation plan and CTE Pathway. During the meeting, counselor will discuss and promote awareness of the advanced academic/CTE pathway and the benefits. Castleberry realizes the importance of retaining highly qualified teachers. Castleberry ISD will provide stipends to teachers for their master's degree and stay competitive in salary compensation.

Castleberry High School would organize a parent information session announcing the benefits of advanced academics such as AP CSP, explaining the potential benefits of the course and CTE pathway the course is implemented with. Educate parents about the academic preparation for post secondary readiness and opportunity for their child. Offer PSAT 8/9, PSAT/NMSQT will assist in the identification and success of AP Potential students.

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.

Proposed budget supports student needs and district goals of the program by maximizing the use of funds. CISD will use all requested funds to promote and grow the AP CSP opportunities and instruction that increase student success. Grant budget would support CISD in developing teachers teaching computer science by providing professional development in efforts to strengthen their instructional practices and/or supplies that in return provides improved content delivery to our students by providing students with strong learning experiences that produce positive outcomes for their futures. Additionally, the grant will strengthen the longevity of the curriculum implemented and build a continuum for a broader goal of increasing student success.

Funds: AP CSP grant funding will include Administrator, coordinator, and 6 teachers. The administrator will receive a stipend of \$2,000. The coordinator will receive stipend of \$2,000. Teachers will receive stipend of \$1,000.

Supplies and Materials: Requires \$11,200 to cover supplies and materials necessary the Project Lead The Way AP CSP curriculum and required hands-on material called for in the curriculum.

Exam Fees: AP CSP exam fees 40 students x \$34 per exam = \$1,360

Professional Development: Project Lead the Way (PLTW) instructional professional development of AP CSP \$4,800.

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
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