



Maryland

STATE DEPARTMENT OF EDUCATION

GRANT INFORMATION GUIDE

Engineering for US All Grant

Maryland State Department of Education

200 West Baltimore Street
Baltimore, Maryland 21201

Deadline

August 23, 2024
No later than 5:00 p.m. EDT

MARYLAND STATE DEPARTMENT OF EDUCATION

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Program Description

This grant is intended to support the operating costs of Engineering for US All (e4usa). The e4usa grant program is a direct grant, via General Fund Appropriation (134.R00A02.13), administered by the Office of College and Career Pathways at the Maryland State Department of Education (MSDE). The grant provides funding for the implementation of the e4usa program at Local Education Agencies (LEAs) across the state. This program aims to increase enrollment into Career and Technical Education (CTE) Science, Technology, Engineering, and Mathematics (STEM) pathways for students, especially for underserved or underrepresented student populations, through the high-quality e4usa engineering curriculum, thus diversifying the STEM workforce pipeline. The e4usa program offers an innovative approach to providing students with a meaningful experience, while capturing the Computer Science, Engineering, or Technology Education Graduation Requirement (COMAR 13A.04.01).

The e4usa curriculum offers a structured and comprehensive 30-week course designed to increase engineering and technology literacy among students and provide opportunities for students to pursue careers in STEM. To ensure successful implementation of the curriculum and program, e4usa provides teachers, at host LEAs, year-round professional learning, and technical assistance, to build awareness and momentum towards Blueprint-aligned college and career pathways.

The e4usa grant program is committed to empowering teachers with the necessary tools and knowledge to deliver high-quality engineering education. Through its professional learning programs, the e4usa program aims to enhance teachers' skills in engineering design while incorporating classroom engagement and instruction that supports all Maryland students.

AUTHORIZATION

[134.R00A02.13 General Fund Appropriation for Innovative Programs](#)

GRANT OVERVIEW

Name of Grant Program

Engineering for US All Grant

Purpose

The e4usa grant program serves to increase student access to the Maryland K-12 STEM pipeline through an engineering curriculum and professional learning program. The learning program is aligned with Maryland's Career and Technical Education Four-Year State Plan, the Blueprint, and the specific needs of teachers and students.

Dissemination

This Grant Information Guide (GIG) was released on July 8, 2024.

Deadline

Proposals are due no later than 5 pm on August 23, 2024.

Grant Period

July 1, 2024 -June 30, 2025

Funding Amount Available

\$500,000

Estimated Number of Grants

One (1)

Eligibility

This funding opportunity is designed for Engineering for US All.

Submission Instructions

Grant applications must be submitted by 5:00 pm August 23, 2024, via email to charles.nichols@maryland.gov.

PROGRAM CONTACTS**Scott Nichols**

Postsecondary Programs Coordinator
Office of College and Career Pathways
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charles.nichols@maryland.gov

Tiffany DeJesus

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Office of College and Career Pathways
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State Responsibilities

MSDE is responsible for providing required information, data, documentation, and technical assistance to facilitate the grantee's performance of the work. MSDE program staff will be available and make every effort to support on demand additional assistance when requested throughout the grant period. In addition, MSDE will monitor program implementation throughout the grant performance period to ensure each council is on target to meet its goals and fully expend its awarded program resources.

Use of Funds

Approved program expenses will be reimbursed upon submission and approval of an invoice with supporting documentation (i.e., receipts, purchase orders, etc.). Please ensure that funding is available within your organization to cover any initial expenses.

Funds may be used for:

- Materials and supplies to support curriculum development, professional development, and instruction, including software and equipment.
- Purchase of vetted curriculum or costs to develop curricula.
- Equipment specific to implementing the e4usa course at each LEA (one-time capital equipping costs for each school).
- Publicizing or marketing the initiative and curriculum to the community through social media or other means; and promotional items (e.g., shirts, key chains, bags, mugs).
- Participation in and/or development of professional learning activities aligned to the e4usa programming.
- Faculty stipends (stipends are only allowable for work performed outside of the regular workday).
- Stipend for a consultant or faculty member to coordinate apprenticeship placements outside of their regular work duties (funds used for an apprenticeship coordinator must provide an explanation of how the responsibilities will be sustained after the grant ends).
- If travel more than 50 miles from home is required for planned professional learning, the below per diem rates apply. If local rates are higher, the grantee may make up the difference using local funds.
 - Mileage: \$0.67/mile
 - Breakfast: \$15
 - Lunch: \$18
 - Dinner: \$30
- Administrative costs not to exceed 10% of the total grant, including indirect costs.
- Other potential costs subject to the approval of MSDE, including out-of-state travel.

Funds may not be used for:

- Supplanting or supplementing an LEA employee's existing salary
- Tuition
- Renting or maintaining building space
- Food or meals
- Program maintenance

- Furniture to equip labs or classrooms
- Purchase of career information delivery system site licenses
- National, state, or local membership dues or fees
- Construction of temporary or permanent structures
- Purchase of equipment for administrative purposes
- Administrative and indirect costs that exceed 10% of the grant amount

Getting Started

LEARN

- Read this document in its entirety as it provides a comprehensive overview of the various opportunities to participate, the application process, and the grant program timeline.

CONSIDER

- Examine the e4usa curriculum, and program and evaluate the strength of outcome alignment with [Perkins V](#), the [Maryland CTE Four-Year State Plan](#) , and the [Blueprint](#).
- Determine ways in which e4usa could integrate e4usa Professional Development into existing teacher professional development at host LEAs.

COLLABORATE

- Identify the primary point of contact and key collaborators responsible for the application submission.
- Build in opportunities to gather input from educators, industry leaders, and other stakeholders.

APPLY

- Attend the Customer Service Session. (Required)
- Submit the online grant application, by the application deadline, with all required appendices. (Required)

Program Requirements

OVERVIEW

To be considered for funding, Engineering for US All (e4usa) must demonstrate a commitment to the following outcomes:

- e4usa has developed effective strategies to inform and prepare students for entry into STEM CTE programs of study at their LEA. This may include activities such as career exploration, mentorship programs, and industry partnerships.
- e4usa has clear intentions to use the program to build a K-12 STEM pipeline. This means that the program should be designed to engage students and encourage them to continue their STEM education to and through high school.
- Students will have access to essential technologies and materials, including physical and/or virtual learning platforms. The grant program should provide students with the necessary tools and resources to fully participate in e4usa and achieve the program's well-articulated learning objectives.
- Student activities are aligned with Standards for Technological and Engineering Literacy (STEL), published by ITEEA in 2020. These are standards referenced in COMAR 13A.04.01 legislation. The program should be designed to support and enhance the existing curriculum or instructional programs and should be consistent with the learning objectives of these standards.
- Logistics, such as professional learning dates, times, and locations, are clearly articulated and support the goals of the program. The program should be well-organized and clearly communicate the expectations for student and teacher participation and engagement.
- Compliance with LEA safety and privacy policies, including those for non-system employees, is documented. The program should be conducted in accordance with all relevant policies and regulations to ensure the safety and privacy of students and staff.
- Access for students with disabilities regarding location, technologies, and digital resources is readily available. The program should be designed to accommodate students with a range of disabilities and ensure that they have equal access to the program's learning opportunities.

A strong grant application will connect proposed activities to their long-term impact on CTE and engineering and technology programs of study. The following questions should be addressed in the application:

- How will the e4usa program be intentionally used to increase enrollment in CTE pathways and engineering and technology courses?
- What recruitment strategies will be implemented to target participation from traditionally underrepresented groups including female students and students of color?
- How will the proposed program align with STEL?
- What strategies will be used to sustain the e4usa curriculum and program beyond the grant funding period?

- How will e4usa involve parents, guardians, and the wider community in supporting the program and encouraging student participation?
- How will e4usa measure the success of the program, both in terms of student engagement and achievement, as well as long-term impact on CTE and engineering and technology programs of study enrollment?
- What kind of professional development or training opportunities will be provided for the instructors delivering the 30-week curriculum?
- What resources and materials may be provided to ensure high-quality professional learning for e4usa instructors? Where will the resources and materials be housed, and will teachers and administrators have access to them?
- What practices will be integrated into the e4usa program to ensure that the program is accessible to all students?
- How will school resource personnel, including school counselors and administrators, be informed of the program, and leveraged for program support, recruitment, and retention?
- How will the e4usa course be used to elevate existing CTE pathways or be used to create an independent e4usa program of study (including submission for approval)?
- LEAs that partner with e4usa to deliver the e4usa program and curriculum, will be required to sign a Letter of Intent (LOI) indicating that they will be using the e4usa program. How will e4usa recruit participating LEAs and ensure that each LOI is signed and submitted to MSDE by January 15, 2025?
- By January 15, 2025, e4usa will be required to submit to MSDE articulation agreements with all colleges and universities that, upon matriculation, ensure students receive postsecondary credit for aligned e4usa coursework. How will e4usa negotiate these agreements and increase postsecondary partnerships year-to-year?

ESSENTIAL ELEMENTS OF HIGH QUALITY CTE PROGRAMMING

Essential Element 1: Reimagining Secondary and Postsecondary Pathways

[Maryland Career and Technical Education Pathways](#) are statewide programs designed to prepare students for the college and career pathways of choice. All CTE programs are aligned to nationally or state-recognized industry and academic standards.

CTE programs are organized by career clusters and based on academic and technical skill standards to ensure student preparation for both college and careers. High-quality CTE programs include work-based learning experiences, such as the high school level of a registered apprenticeship and multiple opportunities for students to earn college credit and/or industry-recognized occupational credentials.

LEAs and Institutions of Higher Education (IHEs) may apply for grant funds to implement new or enhance existing CTE programs of study consistent with MSDE's career cluster frameworks and in alignment with the recommendations of the Maryland CTE Committee. At a minimum, this strategy must include: recent labor market information clearly showing the proposal is connected to high-wage, high-skill, or in-demand careers; documented support from the LEA or IHE industry advisory board; alignment between secondary, postsecondary, and workforce pathways; embedded Career and Technical Student Organization (CTSO) participation; opportunities to earn industry-recognized certificate or certification options for articulated and/or dual credit; and work-based learning

experiences leading to, and including, the completion of a high school level of a registered apprenticeship program.

Engineering for US All must address each of the following questions in the application:

- Does the available labor market information support the need for the e4usa program?
- Are program offerings aligned and articulated across secondary and postsecondary education within your county, region, and the state? How do you intend on ensuring alignment?
- How does e4usa plan to incorporate relevant academic, technical, and career readiness and employability skills?
- How does e4usa plan to offer students the opportunity to earn a relevant industry-recognized certificate or certification?
- How does the e4usa program create opportunities for all students to have access to CTSO activities?
- How will the e4usa program aid in increasing enrollment into CTE programs at participating LEAs?
- How will the e4usa program and curriculum eliminate barriers to extended learning experiences, such as work-based learning opportunities leading up to and including high school-level registered apprenticeships, CTSO participation, and the attainment of postsecondary and industry-recognized certificate or certification?
- How will e4usa ensure alignment between its program and the Blueprint's goal for 45% of high school graduates completing an apprenticeship or obtain an industry-recognized credential? How will e4usa support LEA pathways in achieving this goal?

Essential Element 2: Expanding Career and Technical Student Organizations

CTSOs enhance student learning through contextual instruction, leadership, personal development, applied learning, and real-world application. These organizations are designed to be an integral part of the instructional program by directly integrating the theoretical classroom knowledge with hands-on, skills-based demonstrations, effectively extending the teaching and learning experiences for students. The MSDE Office of College and Career Pathways currently recognizes four CTSO organizations: [Educators Rising](#), [Future Business Leaders of America](#), [FFA](#) (formerly Future Farmers of America), and [SkillsUSA](#).

Engineering for US All must scale CTSOs within their program. At a minimum, this strategy must include: how e4usa will ensure all students have access and opportunity associated with CTSO membership and co-curricular experiences, especially for underserved or underrepresented student populations; how the CTSO is supporting and elevating the work being accomplished in the classroom; how the CTSO experience will connect students to the college and career pathways associated with their CTE program of study; and how e4usa will partner with LEAs and IHEs, as relevant, to connect students to a broad array of college and career options.

Engineering for US All must address each of the following questions in the application:

- How will e4usa build partnerships with CTSOs into its current program?
- How will the e4usa program prepare students for participating in a CTSO?
- How will e4usa support the current CTSO ecosystem?
- How will the applicant ensure the CTSO provides opportunities for all students, especially those from underserved or underrepresented student populations?
- How will e4usa strengthen the relationship between e4usa and the CTSO associated with its program, including improving student retention?
- How will e4usa connect CTE courses and the CTSO experience to community service and other meaningful engagement opportunities?
- Essential Element 3: Developing and Delivering High-Quality Professional Learning
- Engineering for US All may apply for grant funds to develop, expand, and scale e4usa professional learning for teachers to ensure successful implementation of the curriculum. At a minimum, this strategy must address how e4usa will elevate professional learning to increase STEM pathway access and opportunity for students, especially for underserved or underrepresented student populations; how the professional learning will build awareness and momentum towards Blueprint-aligned college and career pathways; and how e4usa plans to use disaggregated student data to develop targeted instructional training programs to meet the needs of all CTE students.
- Engineering for US All must address each of the following questions in the application:
 - What is the plan and rationale for the e4usa professional learning program, and how does it align with Maryland's Career and Technical Education Four-Year State Plan, the Blueprint, and the specific needs of teachers in the program? How were these needs determined?
 - The Accountability and Implementation Board's Initial Comprehensive Blueprint Implementation Plan calls for "developing a fully aligned instructional system including curriculum frameworks, syllabi, assessments, clear examples of standard-setting work, and formative assessments to keep students on track." How will the funding associated with this strategy drive that work?
 - How do the proposed activities align to high quality professional learning standards?
 - What instructional strategies and approaches will be emphasized?
 - What are the specific learning outcomes or goals for the e4usa professional learning program?
 - What resources and materials do you anticipate providing to instructional staff as a part of the e4usa professional learning program?
 - What will be the level of interaction and collaboration with other CTE educators at host LEAs, and how will this enhance each LEA's professional CTE network and community?
 - How will e4usa evaluate each LEA based program for effectiveness, and what measures are in place to ensure ongoing improvement?
 - What kind of ongoing support and follow-up will be provided for e4usa teachers?

- If the professional learning activities are offsite (e.g., an out-of-town conference), describe for each conference: the number of participants attending, including name and title; name of the conference, dates, anticipated number of lodging nights, and if meals will be purchased separately or as a part of the conference registration fee.
- Describe how e4usa's professional learning program will assist LEAs in achieving the goal to ensure alignment between the CTE course(s) being taught, enhancing student access and opportunity for a comprehensive CTE experience, and the Blueprint's goal that 45% of high school graduates will complete an apprenticeship or an industry-recognized credential.

Essential Element 4: Meaningful Expansion of High School level Apprenticeship Opportunities

Maryland is currently recognized as a national leader in workforce development, job training, and apprenticeships. According to the Maryland Department of Labor, there are 3,833 businesses and 181 program sponsors actively participating in the state's registered apprenticeship program. As of November 2021, there were 11,498 registered and paid apprentices.

However, the Blueprint for Maryland's Future states that by 2030, 45% of high school students who, prior to graduation, complete the high school level of a registered apprenticeship or an industry-recognized credential (MD Code, Education, §21-204 (a)). In 2021, only about 7% of Maryland high-school graduates met the requirements to complete a high school level of a registered apprenticeship program approved by the Division of Workforce Development and Adult Learning within the Maryland Department of Labor. In 2021, Maryland had 57,423 graduates. To meet the 45% goal, 25,840 of these graduates would have needed to complete an apprenticeship or obtain an industry-recognized credential.

When expanding high school level apprenticeship programs, the focus should be two-fold: first, to continue recruiting employers to start programs; and second, to work with current youth apprenticeship employers on extending their apprenticeships beyond high school into a full registered apprenticeship.

While the current apprenticeship pathways continue for this period, the process for generating sufficient numbers of high school level of registered apprenticeships can begin with several early steps:

- Build fully registered apprenticeships for positions in state and local governments. Plausible targets have been identified in task force reports on [health, transportation, and public safety positions](#). Teacher apprenticeships offer additional opportunities.
- Encourage and help existing registered apprenticeship programs begin at the high school level. For example, if a local or regional organization is currently offering a registered apprenticeship program in the information technology sector, providing them with details about how to interact with and access the CTE system could encourage and foster creation of a youth apprenticeship opportunity for students.

Please note that this strategy specifically calls out high school level apprenticeship opportunities. While job shadowing, internships, and other work-based learning opportunities are valuable experiences for students within a fully featured CTE system, the majority of experiences should be at the high school level of a registered apprenticeship program.

Engineering for US All must address the following in the application:

- Demonstrable understanding of evidence-and research-based practices and policies pertaining to the high school level of a registered apprenticeship program at all stages of development and implementation.
- Every state-approved CTE program of study provides students the opportunity to earn an in-demand industry-recognized credential. Industry-recognized credentials are the demonstration of knowledge and skills of professionals in their chosen field. Engineering for US All should include information on an industry-recognized credential, aligned to the e4usa curriculum and coursework, that students will be able to test for following the completion of the coursework.
- How e4usa intends to increase access to high school level registered apprenticeship opportunities to all students, especially those in underserved or underrepresented communities.
- Proposed outreach strategies to pertinent stakeholders, such as Perkins-funded IHEs (community colleges) with aligned career pathways, the local and/or regional business community, pertinent nonprofit organizations, intermediaries, and labor organizations.
- Specific strategies to engage students from historically underserved populations, from homes where English is not the primary spoken language, have experienced homelessness, and/or with developmental delays, disabilities, or special needs.

Application Requirements

PROPOSAL COVER PAGE

Proposals must include a completed Cover Page provided in the application for participation that includes a project statement. The project statement should briefly describe the project's outcome(s) and strategies (i.e., what the project will do and how it will be accomplished). Do not exceed 100 words. The Cover Page should be printed and signed by e4usa's Executive Director.

PROJECT ABSTRACT

In the Project Abstract, introduce the project to the reader. The abstract should be factual, brief, and focused on e4usa's efforts. Do not assume the reader is familiar with the proposed project. The project abstract should cover the core aspects of the proposed project, such as the populations served, a brief description of the goals, the strategies to meet them, and the roles of the partners.

PROJECT NARRATIVE

The project narrative consists of the sections below. These sections will be scored by reviewers.

EXTENT OF NEED

Describe the conditions or needs to be addressed through the e4usa grant program. Include a clearly defined problem supported by a needs assessment and supporting data. Document current or past efforts to address the problem and show how those efforts addressed the need. Also, discuss history or expertise in dealing with the problem by implementing programming or engaging in other related activities informed by evidence and/or research. A thorough and thoughtful application will show a strong connection to CTE and STEM programs and communicate intentional strategies to develop awareness and recruitment pipeline into these programs.

GOALS, MEASURABLE OUTCOMES, AND MILESTONES

Goals: State the overall goals of the project. The goals should address the main problem identified at the beginning of the needs assessment. While there should be at least one goal, a stronger need is demonstrated through multiple goals. For each goal statement, identify objectives and anticipated outcomes to be accomplished. It is imperative that objectives be established for every target population. For example, if the project seeks to increase student achievement by training teachers, there must be objectives for both students and teachers.

Since goals and objectives are not evaluated until the end of the year, milestones, or benchmarks, must be established to measure progress during the year. Milestones are evaluated quarterly. A thorough and thoughtful application will include measurable goals showing how the e4usa program will intentionally develop an awareness of, and recruitment to, aligned CTE and/or STEM programs. Below are some tips for writing goals:

- Directly connect the e4usa program to Pillar 3 of the Blueprint.
- Tie goals and objectives directly to the need statement.
- Include all relevant groups and individuals in the target population.
- Think about how you will measure the change projected in each objective. If there is no way to measure a goal, it is not measurable and should be rewritten.

Objectives are the specific steps that need to be taken in order to achieve the goals. They should be specific, measurable, achievable, relevant, and time-bound (SMART). Each goal should have associated objectives, which together form the roadmap for achieving the goal. Objectives should be designed with the specific needs of the target population in mind. Below are some tips for writing objectives:

- Specificity is key. Objectives should provide a clear description of what is to be done, by whom, and by when. They should be detailed enough that someone unfamiliar with the project could understand what is intended.
- Objectives should be measurable. There should be a way to assess whether each objective has been achieved. This could be quantitative (e.g., a certain number or percentage) or qualitative (e.g., a specific outcome or change in behavior).
- Objectives should be achievable. While it's good to be ambitious, objectives should also be grounded in reality. Consider the resources, constraints, and the specific context of the project when setting objectives.
- Objectives should be relevant. Each objective should clearly relate to the overall goal and contribute to its achievement. Avoid including anything that is not directly aligned with the goal. A well-written objective might look like this: "Develop a comprehensive extracurricular e4usa program that aligns with the Maryland K-12 Standards for Technological and Engineering Literacy."

Measurable Outcomes: Measurable outcomes are the anticipated outcomes to be accomplished for each year of the project and must be related to a goal. Outcomes break the long-term goal into steps or address the factors contributing to the problem addressed by the goal. It is imperative that outcomes be established for every target population the project is designed to affect. For instance, if the project seeks to increase student achievement by training teachers, there must be outcomes for both students and teachers.

Milestones: Ongoing evaluation is essential to the management of a project. Since goals and outcomes are not evaluated until the end of the year, milestones must be established to measure progress during the year. Milestones should be evaluated during each quarter of the year. Since milestones are intended to indicate progress towards an outcome, each milestone must be related to a stated outcome. Keep in mind that milestones are indicators of progress and may not use the same measurement tool as the objective to which they are related. A project may take months before there is an impact on clients, or the rate of improvement may level off over time. Milestones should anticipate this and be gauged accordingly. Be sure that milestones are ambitious, yet attainable.

PLAN OF OPERATION, KEY PERSONNEL, AND TIMELINE

The Plan of Operation includes the strategies and activities that will be implemented to achieve your goals, outcomes, and milestones. Create a plan of operation in chart form that addresses, at a minimum, the key components of the program's implementation or expansion.

- Include a timeline and the key personnel associated with each component of the plan of operation. For key personnel, include the e4usa's instructor(s) and program leads (if known), the program contacts for the school system, principal of the school where the programs will be implemented, and any other personnel who will be involved. Indicate names, titles, affiliations, roles, and responsibilities.
- Include a clear discussion of LEA, industry and postsecondary partners' respective roles in the program, the benefits each expects to receive, and the specific contributions each will make to the

project (articulated credit agreements, LEA host sites, Apprenticeships, equipment, personnel, or other resources). It is essential to document each partner's commitments to the project. Append letters of commitment from each, describing roles and quantifying contributions. Never assume that reviewers will automatically know who a proposed partner is, what that partner is capable of or willing to commit to the project, or why the partner is participating.

- Convene an e4usa Steering Committee composed of e4usa instructors, administrators, and lead points of contact at participating schools and LEAs who will oversee the implementation of the grant. Describe the extent to which the Steering Committee will be involved in the implementation, expansion, or improvement of the program. List the names, titles, and affiliation of each steering committee member.
- Engineering for US All must describe how work with the Steering Committee will occur to:
 - Identify the equipment and/or materials of instruction to support implementation of the e4usa program and to develop a reasonable budget;
 - Submit to MSDE, before the end of the grant period (June 30, 2025), the Maryland CTE program of study proposal that aligns to the program being implemented (or an amendment to an existing proposal); and
 - Identify the appropriate professional development that aligns to the e4usa program.

EVALUATION PLAN AND EVIDENCE OF IMPACT

- How will e4usa assist each partnering LEA in reaching the goal that by 2030, 45% of high-school graduates will have obtained an industry-recognized credential or completed the high school level of a registered apprenticeship program?
- What other measurable improvements are expected to occur once the program has been fully implemented?
- What data will be collected to prove that the program has had the intended effects?
- How will these data be collected?
- What is e4usa's 3-year plan? How will the program be implemented in years two and three?
- How will e4usa partner with schools to ensure that e4usa becomes a state approved CTE program of study?

Evidence of impact identifies the consequences of the actions taken and the extent to which program or project goals were achieved. Evidence of impact is made clear through outcome evaluation and includes being clear about evaluation standards and identifying improvement. Annual evaluation and quarterly progress reports should be consistent with the program's goals and objectives. An effective ongoing plan should evaluate milestones and help project staff make informed decisions.

SUSTAINABILITY PLAN

Describe plans for continuing the e4usa program beyond the funding cycle. Answer questions such as how the program will be sustained after funding ends and what are the plans for maintaining the program's partnerships, and eventual program of study.

Budget and Budget Narrative

The itemized grant [budget](#) form (C-1-25) can be accessed through the MSDE grants website, and a proposed budget must be submitted with the application. If difficulties are encountered in categorizing the budget, consult with the appropriate financial agent from your e4usa. After submission and before final approval, adjustments may be required based on approved spending amounts. At that time, a final budget form must be signed from the financial manager at e4usa.

The application form includes a space for applicants to provide the program's budget and a budget narrative. All costs described in the project narrative should appear in the budget narrative and must have a corresponding entry in the itemized budget. Reviewers should be able to see a clear connection between the project activities and the budget line items.

Use the format indicated by the following excerpt from a sample Budget Narrative.

SALARIES AND WAGES (LIST SEPARATELY FOR EACH POSITION)

Line item	Calculation	Requested	In-Kind	Total
Project Manager	\$50/hr. x 40 hrs. per week x 52 weeks	\$83,200	\$20,800	\$104,000
Total for salaries & wages:		\$83,200	\$20,800	\$104,000

CONTRACT SERVICES

Line item	Calculation	Requested	In-Kind	Total
Support to convert presentation to virtual platform that includes closed captioning.	\$3,000			\$3,000
Total for salaries & wages:				\$3,000

Appendices

The following appendices must be included but not apply to the page limit of the Project Narrative.

Appendix A: [A signed recipient assurances page](#)

Appendix B: [The Grant Information Survey Form](#)

Appendix C: [A signed C-1-25 MSDE budget form](#)

Appendix D: Signed letters of commitment from all postsecondary partners, apprenticeship providers, project partners, and principals of participating schools. These should be addressed to the superintendent or head of the grantee agency acting as the head of the agency. Letters should not be addressed to MSDE.

Appendix E: Resume(s) of Key Personnel

Appendix F: Evidence of status of a non-profit 501(c)(3) organization, if applicable

The Review Process

The review of proposals will be a three-part process:

1. Written applications will be pre-screened for submission requirements and inclusion of all required sections. Applications not meeting all pre-screen requirements may be returned to the applicant for revisions.
2. A review committee established by MSDE will evaluate applications using the scoring rubric. The scoring rubric is tailored to the grant program, its intent, and intended impact on the target population.
3. Final approval for awards will be determined by the review committee.

REVIEW COMMITTEE

The committee will be composed of representatives from MSDE's Office of College and Career Pathways. Reviewers will assign numerical scores to each proposal based on the criteria on the scoring rubric. Each application will be reviewed and scored based on all documents submitted. Applications may be returned to the applicant if some or all criteria do not meet the criteria standard.

Engineering for US All Grant Scoring Rubric

PROJECT ABSTRACT

Level 3 Exceeds Criteria	Level 2 Meets Criteria	Level 1 Does Not Meet Criteria
The project abstract outlines a concise and comprehensive summary of the target population, goals, strategies, and partnerships.	The project abstract addresses the required components.	The project abstract is missing or does not address the required components.

EXTENT OF NEED

<p>Level 3 Exceeds Criteria</p>	<p>Level 2 Meets Criteria</p>	<p>Level 1 Does Not Meet Criteria</p>
<p>The applicant has provided a comprehensive and well-supported needs assessment that clearly identifies skills or opportunity gaps related to Engineering and technology education and provides compelling data to support the need for the e4usa grant.</p> <p>The needs assessment clearly explains how the gap(s) affects the applicant's community and provides evidence of the applicant's experience and expertise in dealing with the problem.</p> <p>The applicant has demonstrated an established record of addressing issues related to identified needs using evidence- and research informed practices.</p> <p>The applicant has demonstrated a strong connection to CTE, engineering, and technology programming. In addition, the applicant has proposed strategies for intentionally developing an awareness and recruitment pipeline into these programs.</p> <p>The needs assessment includes a thorough discussion of past and current efforts to address the problem, including a critical evaluation of the effectiveness of those efforts.</p>	<p>The applicant has provided a needs assessment that identifies a skill or opportunity gap related to robotics education and provides some supporting data.</p> <p>The needs assessment explains how the gap(s) affects the applicant's community and provides some evidence of the applicant's experience and expertise in dealing with the problem.</p> <p>The applicant has addressed issues related to identified needs using evidence- or research informed practices.</p> <p>The applicant has demonstrated some connection to CTE and engineering and technology programming and has proposed some strategies for developing an awareness and recruitment pipeline into these programs.</p> <p>The needs assessment includes a discussion of past and current efforts to address the problem.</p>	<p>The applicant has not provided a needs assessment that clearly identifies a skill or opportunity gap related to robotics education or provides supporting data.</p> <p>The needs assessment does not clearly explain how the problem affects the applicant's community or provide enough evidence of the applicant's experience and expertise in dealing with the problem.</p> <p>The applicant has not demonstrated that they have implemented evidence- or research informed practices related to stated needs.</p> <p>The applicant has not demonstrated a clear connection to CTE and engineering and technology programming or proposed strategies for developing an awareness and recruitment pipeline into these programs.</p> <p>The needs assessment does not include a clear and thorough discussion of past and current efforts to address the problem.</p>

GOALS, MEASURABLE OUTCOMES, AND MILESTONES

Level 3 Exceeds Criteria	Level 2 Meets Criteria	Level 1 Does Not Meet Criteria
<p>The applicant has provided clear and measurable goals that address the main gap(s) identified in the needs assessment and demonstrates a strong connection to CTE and engineering and technology programming. For each goal statement, the applicant has identified specific objectives and anticipated outcomes to be accomplished for every target population.</p> <p>The applicant has established detailed, ambitious, and measurable milestones to track progress and has included a plan for monitoring and evaluation of progress toward goals and objectives. The goals, objectives, and milestones are well aligned with the needs assessment, and demonstrate a strategic approach to addressing the identified gaps.</p>	<p>The applicant has provided goals that address the main gap(s) identified in the needs assessment and demonstrates some connection to CTE and engineering and technology programming. For each goal statement, the applicant has identified some objectives and anticipated outcomes to be accomplished for every target population.</p> <p>The applicant has established some milestones to track progress throughout the year and has included some plan for monitoring and evaluation of progress toward the goals and objectives.</p> <p>The goals, objectives, and milestones are aligned with the needs assessment, and demonstrate some approach to addressing the identified problem.</p>	<p>The applicant has not provided clear and measurable goals that address the main gap(s) identified in the needs assessment or demonstrate a connection to CTE and engineering and technology programming. For each goal statement, the applicant has not identified specific objectives or anticipated outcomes to be accomplished for every target population.</p> <p>The applicant has not established clear milestones to track progress throughout the year or has not included a plan for monitoring and evaluation of progress toward the goals and objectives. The goals, objectives, and milestones are not aligned with the needs assessment or demonstrate a clear approach to addressing the identified gap(s).</p>

PLAN OF OPERATION, KEY PERSONNEL, AND PROJECT TIMELINE

Level 3 Exceeds Criteria	Level 2 Meets Criteria	Level 1 Does Not Meet Criteria
<p>Proposed curriculum and professional development are innovative, evidence-based, and likely to transform Engineering and Technology pathways for students. There is a timeline established for each phase of the program and lists the individuals responsible.</p> <p>The target student population is clearly identified, including demographic information such as grade level or special needs, and the program's potential impact on these students is well-articulated. Key personnel have considerable experience related to engineering and technology education.</p> <p>A professional development plan is in place for inexperienced staff. The partner plan provides a clear discussion of LEA, industry and postsecondary partners' respective roles in the program, and the benefits to and contributions of each.</p>	<p>Proposed curriculum and professional development are evidence-based and meet the requirements for the program strategy.</p> <p>There is a timeline for all key activities.</p> <p>Key personnel are selected that have relevant experience in the field. The names and titles of personnel are provided and the percentage of time they will dedicate to this program.</p> <p>The partner plan is included with a general description of partners' respective roles in program, the benefits each expects to receive, and the specific contributions each will make to the project.</p>	<p>Proposed curriculum and professional development are listed and may not be clearly aligned to a strategy. There is no clear plan of operation. The timeline is either missing or does not include dates for all activities.</p> <p>Key personnel information is incomplete. The partner plan is incomplete.</p>

EVIDENCE OF IMPACT

<p>Level 3 Exceeds Criteria</p>	<p>Level 2 Meets Criteria</p>	<p>Level 1 Does Not Meet Criteria</p>
<p>The applicant has provided a detailed and well-planned evaluation and dissemination plan that includes annual evaluation reports and quarterly progress reports that are consistent with the project's goals and objectives.</p> <p>The evaluation plan is designed to assess the entire project, beginning to end, and is an integral element in the project's planning, design, and implementation.</p> <p>The applicant has provided a clear and effective ongoing plan to evaluate milestones on a quarterly basis, which will assist project leadership in making informed decisions to support continuous improvement.</p> <p>The dissemination plan is well-developed and includes strategies for sharing the project's successes, challenges, and lessons learned with stakeholders both within and outside of the organization.</p>	<p>The applicant has provided a plan for annual evaluation reports and quarterly progress reports that are consistent with the project's goals and objectives.</p> <p>The evaluation plan is designed to assess the project as a whole and is seen as an important part of the project's planning, design, and implementation.</p> <p>The applicant has provided some plan for evaluating milestones on a quarterly basis, which will assist program leadership in making informed decisions to support continuous improvement.</p> <p>The dissemination plan includes some strategies for sharing the program's successes, challenges, and lessons learned with stakeholders both within and outside of the organization.</p>	<p>The applicant has not provided a clear or well-developed evaluation and dissemination plan for the project.</p> <p>The evaluation plan is not designed to assess the project as a whole or is not seen as an integral part of the project's planning, design, and implementation.</p> <p>The applicant has not provided a clear plan for evaluating milestones on a quarterly basis or has not explained how this plan will assist program leadership in making informed decisions to support continuous improvement.</p> <p>The dissemination plan is not well-developed or does not include strategies for sharing the program's successes, challenges, and lessons learned with stakeholders both within and outside of the organization.</p>

SUSTAINABILITY PLAN

Level 3 Exceeds Criteria	Level 2 Meets Criteria	Level 1 Does Not Meet Criteria
<p>The applicant provides a comprehensive plan for ensuring the ongoing success of the proposal beyond the funding cycle that includes identification of additional resources. A detailed plan for maintaining partnerships and their contribution to sustainability is described.</p>	<p>The applicant provides a continuation plan beyond the funding cycle and describes how partnerships will be maintained.</p>	<p>The application does not include a specific, time- limited, and realistic plan to exist after the funding cycle.</p>

BUDGET AND BUDGET NARRATIVE PLAN

Level 3 Exceeds Criteria	Level 2 Meets Criteria	Level 1 Does Not Meet Criteria
<p>All requirements listed under meets criteria are met. In addition, the budget includes sufficient resources for successful execution of the proposed program.</p>	<p>The budget reflects all program activities per strategy and does not exceed the allowable aggregated grant amount. Justification is provided for all expenses. The costs are reasonable and allowable. All line items contain the calculations used to derive the expected cost. There are no mathematical errors.</p>	<p>The budget does not reflect all program activities, and/or exceeds the allowable amount per strategy. There may be missing calculations and/or mathematical error.</p>

Reporting Requirements

Grantees must comply with the following reporting requirements:

Date	Reporting Requirements for Each Year
Ongoing	Fiscal and program monitoring; all invoices must be accompanied with supporting documentation.
October 15, 2024	Quarterly Project Update
January 30, 2025	Interim Progress Report (C-1-25 C)
August 15, 2025	Final Progress Report (C-1-25 D)
September 30, 2025	Final Evaluation Report (Narrative and Fiscal)

Notes: Any requests for amendments must be submitted at least 45 days before the grant period ends, and must be submitted using the C-125-B form found in the [Grant Budget Forms Workbook](#) on the [MSDE grants webpage](#). Final invoices must be submitted no later than 60 days after the grant period ends.

Grant Application Timeline

Date	Timeline Event
July 8, 2024	The Grant Information Guide and the application for participating are released.
July 9, 2024	MSDE will hold a virtual customer service support session for interested applicants.
July 11, 2024	MSDE will hold a virtual customer service support session for interested applicants.
July 15, 2024	MSDE will hold a virtual customer service support session for interested applicants.
August 23, 2024	The grant application period closes.
August 24, 2024	MSDE begins reviewing applications for completeness and minimum requirements.
August 24, 2024 – August 30, 2024	MSDE Review Committee will evaluate proposals.
August 30, 2024	MSDE will notify applicants of the award status.
July 1, 2024	The grant period begins.
June 30, 2025	The grant period ends.

Non-Discrimination Statement

The Maryland State Department of Education does not discriminate on the basis of age, ancestry/national origin, color, disability, gender identity/expression, marital status, race, religion, sex, or sexual orientation in matters affecting employment or in providing access to programs and activities and provides equal access to the Boy Scouts and other designated youth groups. For inquiries related to Department policy, please contact:

Equity Assurance and Compliance Office
Office of the Deputy State Superintendent for Finance and Operations

Maryland State Department of Education
200 W. Baltimore Street - 2nd Floor
Baltimore, Maryland 21201-2595

410-767-0123 - voice

410-767-0431 - fax

Deaf and hard of hearing use Relay.

The General Education Provisions Act (GEP) Sect 427

Each application must develop and describe the steps the applicant proposes to take to ensure equitable access to, and equitable participation in, the project or activity to be conducted with such assistance, by addressing the special needs of students, teachers, and other program beneficiaries to overcome barriers to equitable participation.

Customer Service Support Sessions

MSDE will hold one customer service support session for interested applicants. During this session, MSDE personnel will provide an overview of the application process. The session will be on:

Tuesday, July 9, 2024

2:00 p.m. – 3:00 p.m.

Video call link: <https://meet.google.com/ntu-ztcu-pcs>

MSDE will also offer the following office hours:

Thursday, July 11, 2024

11:00 a.m. – 12:00 p.m.

Video call link: <https://meet.google.com/awq-omhw-bnp>

Monday, July 15, 2024

10:00 a.m. – 11:00 a.m.

Video call link: <https://meet.google.com/wqu-ordi-orn>

MSDE staff will also be available to provide technical assistance throughout the grant application process. If you have questions about the application or the process, please contact:

Scott Nichols

Postsecondary Programs Coordinator
Office of College and Career Pathways
(410) 767-0177

charles.nichols@maryland.gov

Tiffany DeJesus

Director of Operations, Accountability, and Strategy
Office of College and Career Pathways
(410) 767-0518

tiffany.dejesus@maryland.gov

Attachment

Engineering for US All Fiscal Year 2025 Grant Application for Participation