

UNITE

Request for Proposals

A pre-collegiate summer program for talented high school students from groups historically underrepresented and underserved in science, technology, engineering and mathematics (STEM).

UNITE is a program of the Army's Youth Science Cooperative Outreach Agreement (YSCOA), a subset of the Army Educational Outreach Programs (AEOPs). UNITE is coordinated by the Technology Student Association (TSA).



Point of Contact

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Introduction

UNITE is a pre-collegiate summer program for high school students from groups historically underrepresented and underserved in science, technology, engineering, and mathematics (STEM). The initiative is part of the portfolio of outreach efforts contained in the Army's Youth Science Cooperative Outreach Agreement (YSCOA).

The YSCOA is a subset of the Army Educational Outreach Programs (AEOPs) and is charged with addressing national needs for a talented and trained STEM workforce. K-12 initiatives include unique experiences like UNITE, competitions, and high school internships that aim to spark an interest in STEM and encourage participants to pursue college and careers in STEM fields. College and graduate level programs focus on career development and operate with the specific intention of creating a workforce for Army and Department of Defense (DOD) labs.

Virginia Tech is the lead organization in the cooperative formed by the YSCOA. The additional consortium members are the Technology Student Association (TSA), which is the national coordinator for UNITE, the Academy of Applied Science, the George Washington University, the University of New Hampshire and the U.S. Army.

To learn more, visit www.usaeop.com.

About TSA

The Technology Student Association (TSA) is a national, non-profit organization of middle and high school students who have a strong interest in the areas of science, technology, engineering and mathematics (STEM). TSA was chartered in 1978 and since then over 2,000,000 students have participated in its program of activities. Members apply and integrate STEM concepts through co-curricular activities, competitive events, leadership endeavors, and related programs.

To learn more, visit www.tsaweb.org.

Request for Proposals

This RFP marks a change in the coordination of the UNITE program. UNITE sites will be selected on an annual basis through a competitive application process facilitated by TSA. The instructions for the application process are included in this document. Additionally, it should be noted that there are slight but meaningful changes in requirements over those that were provided in past program years. The changes in the site selection process and program requirements have been instituted to enhance the quality and level of impact of UNITE outreach.

Program Outcomes

- Effectively show students the real-world applications of math and science
- Raise student confidence in the ability to participate in engineering activities
- Inspire students to consider engineering majors in college
- Remove social barriers and negative attitudes about engineering
- Promote collaboration and problem-solving in a team environment
- Increase the number of STEM graduates to fill the projected shortfall of scientists and engineers in national and Department of Defense (DoD) careers

Program Requirements

Offerors selected to administer a UNITE program will:

- Provide a four to six week summer academic program—integrated into an existing summer program at the institution—that encourages and prepares students from historically underserved and underrepresented groups in STEM [African American/Black, Latino/Hispanic, American Indian, Alaska Native, or low income by Federal standards (<http://www2.ed.gov/about/offices/list/ope/trio/incomelevels.html>)], who have an aptitude for STEM subjects, to pursue a college education in engineering.
- Provide an academic setting at a level that is appropriate for the grade levels represented.
- Enroll a minimum of ten students for a residential or non-residential program.
- Provide classes taught by qualified high-school teachers or college professors.
- Provide a hands-on program in which the primary focus is rigorous classroom instruction/academic coursework that prepares students for admission into engineering tracks in college.
- Provide college prep workshops for students in which they learn about what it takes to get into college in engineering programs; workshops may have an optional inclusion of SAT/ACT test preparation.
- Provide a pre/post – UNITE academic and support experience (i.e., keep students informed about other activities, serve as mentors, etc.).
- Work with TSA (and through TSA with an Army STEM professional) to host a career day that will increase overall student awareness about STEM career opportunities. This effort will include an Army engineer speaker (if possible), as well as representation from STEM-oriented industry and civil service professionals.
- Educate students on other AEOP programs that are available to high school and college students. (This may be part of the career day and/or accessed via a link from the institution website to the AEOP website.)
- Administer pre- and post-outcomes assessments as established by the Virginia Tech team.
- Request approval from TSA for all marketing materials prior to distribution.
- Incorporate and distribute TSA materials as requested by TSA.

Other Important Information

- An application or registration fee cannot be charged. The program must be free to all applicants.
- The proposal itself and the general information contained in this package are considered “certifications” and are binding on the part of the institution. Therefore, all documents submitted must be signed by both the UNITE coordinator and the immediate superior at the institution.
- Funding is not guaranteed year to year. Each year is funded through an independent competition; therefore, sites must apply to TSA annually for the UNITE grant.
- UNITE funds are used to supplement, not supplant, existing program funds. UNITE funds are to be used to increase the impact of or improve existing high quality programs.
- Funding per UNITE site may vary annually, depending on the disbursement from the Army.
- Anticipated total program funding is approximately \$222,000 for seven to twelve summer 2012 programs. The exact amount granted to each program is not guaranteed. The payment schedule is to be determined.
- Students who participate in a UNITE program must receive a \$100 per week stipend from each UNITE-funded site. If a stipend is not ordinarily provided by an institution, this stipend must be built into the institution’s UNITE program budget.

Important Dates

February 24, 2012	Proposals submission deadline
March 12, 2012	2012 UNITE sites announced
May 1, 2012	Material about each UNITE sites’ program due to TSA for inclusion on the AEOP website
May – August, 2012	2012 UNITE time frame
August 24, 2012	Final report and student data due to TSA

2012 Request for Proposals

INSTRUCTIONS:

Interested schools/colleges/universities/organizations must complete and submit a proposal annually. Please input answers directly into the document, expanding the total number of pages as needed.

I. Contact Information

Organization:
Coordinator name:
Coordinator title:
School mailing address:
School URL:
Coordinator phone:
Coordinator fax:
Coordinator email:
Alternate contact name:
Alternate phone:
Alternate email:

II. Schedule

- A. Date program begins:
- B. Date program ends:
- C. Program hours:
- D. General schedule of events/classes:

Program Requirements

The UNITE program requirements are listed below. For each of the requirements, please explain how your program will meet the requirement and answer any accompanying questions thoroughly. Please provide additional background materials, such as marketing brochures, applications, photos and samples of the curriculum, as applicable.

1. **Seek and encourage high school students considered to be underserved or underrepresented in STEM areas to apply to participate in the program.** How would you promote a UNITE-funded program to eligible high school students and recruit those students (considered to be underserved or underrepresented in STEM areas) to apply to participate in such a program. (Attach any flyers/promotional materials.)
2. **Provide an academic setting appropriate for the grade level/s of the students in the program. Correlate the program to the academic skills needed for student success in a college of engineering.** What are the specific goals of your program? What will your program curriculum include? (Attachments are fine.) What is your plan for meeting the objectives/goals of your program?

3. **Provide a hands-on program—in which the primary focus is STEM education—through rigorous classroom instruction taught by carefully selected high school teachers or college professors.** What are the credentials of the institution and/or the individuals who will work in the program? (Attachments are fine). What is your plan for training the individuals who will work in a UNITE-funded program? (This includes training to provide a safe and secure learning experience for students.)
4. **Host a career day that enhances student awareness about STEM career opportunities, including capacities in which the Army, civil service agencies, business and industry employ engineers. The career day may be supplemented with a visit to a local Army research institute, should there be one nearby.** How would your institution coordinate with the Army, should your program receive UNITE funding?
5. **Reference TSA/AEOP/UNITE in marketing and general program literature.**
6. **Provide materials about the program to AEOP for the AEOP website, with appropriate reference made to TSA and UNITE.**
7. **Name TSA as an additional insured for the UNITE program on the institution’s insurance policy.**
8. **Implement evaluation tools, provided by TSA, during the program. Produce and provide to TSA an end-of-year report about the program. The report will be due on August 24, 2012.** What is your plan for incorporating assessment in the program?

Recruitment

What criteria (i.e. test scores, GPA, recommendations, etc.) will be used to recruit and evaluate students who wish to participate in your program? What is the minimum for these criteria? **(Note: All students who participate in a UNITE program must be American citizens or legal permanent residents.)**

Estimated Enrollment

GRADE	MALE				FEMALE				Total Students
	9	10	11	12	9	10	11	12	
African American									
Latino/Hispanic									
American Indian									
Alaska Native									
Low income (by Federal standards)									
Other:									
TOTAL									

Tell Us About Your Existing Program

Describe your existing summer program (including the name of the program, its purpose/goals, how long it has been in existence, the origin of its funding, etc.), and how UNITE funding will help supplement your program in a beneficial way. If your institution has ever coordinated a UNITE program, please provide details.

Budget

UNITE funds should be considered an add-on to the funding required to run a basic summer program. Generally speaking, all UNITE funds should be utilized in support of the STEM components of the proposed program. UNITE funds may not be used to support transportation to and from the summer program, housing costs, and meals/snacks – these costs should be funded from an outside source. UNITE funding may not be used to fund administrators not directly involved with implementation of the STEM aspects of the program and overhead costs.

UNITE funds may be used to support the following items: STEM instruction, STEM instructional materials/supplies, pay for program facilitators (coordinator, counselor, lab lead, etc.) whose work directly connects to STEM efforts, and student stipends. UNITE funds may be used to pay for transportation to a STEM field trip and for a meal/snack while on that trip.

Please provide the budget for the complete program. Identify and provide an allocation of all funding sources, including UNITE funds and in-kind donations. Be sure to include staff titles, salary/wage calculations, and fringe and indirect/overhead rates.

	Total Program Budget	2012 UNITE Funds
Program administrators (provide job titles and include salary/wage calculation, the fringe rate, and fringe calculation for each)	\$	\$
Instructors (provide job titles and include salary/wage calculation, the fringe rate, and fringe calculation for each)		
Instructional materials/supplies (include computer time/expenses; provide a breakdown of what will be purchased)	\$	\$
Meals/transportation – (provide details about what meals and transportation will be covered; include calculations)	\$	\$
Administrative costs (phone, printing, postage, insurance, etc. – provide a breakdown)		
Overhead/indirect costs (provide a percentage and calculations)	\$	\$
Student stipends (\$100 per student, per week – provide calculations)	\$	\$
Other (include a breakdown)		
TOTAL	\$	\$

Submitting Information to TSA

Proposals, reports and other required documents should be emailed to hlee@tsaweb.org with a cc to rwhite@tsaweb.org **no later than Friday, February 24, 2012**. Please indicate 2012 UNITE in the subject line.

Signatures

We believe that all information contained in this proposal and attendant materials are accurate and that specified conditions and requirements will be adhered to in all particulars. The consequence of failure to comply with all particulars is fully understood.

UNITE site: _____

Signature	Date	Print name
UNITE Coordinator		

Signature	Date	Print name
Institution supervisor (other than UNITE Coordinator)		