

National Security Agency

GenCyber 2022

(CFDA# 12.903)

Proposal Preparation Instructions ATTACHMENT A

1. PROPOSAL FORMAT

Proposals must contain a program narrative, written cost proposal, budget information, and a signed cover sheet, as well as any required government grant forms. Proposals must adequately describe the objectives and approaches outlined in the solicitation **Section II – Proposed Program**. All submissions will be evaluated by technical reviewers in accordance with the evaluation criteria during the selection process.

Please do not upload any zip, html, or PDF portfolios as there is a chance that they cannot be opened on government systems.

All required and provided forms must be used. Offerors who submit a package not utilizing the designated forms, formats, or are missing documents will be deemed incomplete and immediately disqualified and not considered for award.

- a. The proposal narrative must be clear, readily legible, and conform to the following requirements:
 - i. Use one of the following typefaces identified below:
 1. Arial, Courier New, or Palatino Linotype at a font size of 10 points or larger
 2. Times New Roman at a font size of 11 points or larger
 3. Computer Modern family of fonts at a font size of 11 points or larger
 - ii. NOTE: A font size of less than 10 points may be used for mathematical formulas or equations, figure, table or diagram captions and when using a Symbol font to insert Greek letters or special characters. PIs are cautioned, however, that the text must still be readable;
 - iii. No more than 6 lines of text within a vertical space of 1 inch; and
 - iv. Margins, in all direction, must be at least an inch.
 - v. Digital signatures where applicable are acceptable.
- b. Applicants will need to complete and upload the following items to the GenCyber online proposal site to be eligible for consideration:
 - i. **Proposal Cover Page: The proposal cover page will be created within the GenCyber online proposal submission system.** The cover page should not include details on the option year (if applicable).
 - ii. **Signed Proposal Cover Page:** The proposal cover page will be generated by the GenCyber online proposal submission system and can be printed for signature when the proposal is complete.
 - iii. **Proposal Narrative Guidance / Required Information/ Technical Proposal:** The narrative allows you to describe your proposed program or project in 12 pages or less. The narrative for any submitted proposal should be both detailed and concise. Program narratives should adhere to the following format. No

information about the Option year should be included in the proposal narrative. Option year information should be uploaded in the “Other” section. Failure to adhere to this format may result in a proposal not being reviewed. This format matches with the proposal review rubric used for all submissions.

1. **Summary** - Include a brief program overview to include the institution, program name, and highlights of the program. The summary must be 200 words or less. If funded, this summary is used for promotional purposes in events such as the Spring/Fall meetings.
2. **Introduction**
 - a. K-12 Cybersecurity Ecosystem - Include a brief description of target K-12 cybersecurity ecosystem. *Note: there is no need to describe the country’s cybersecurity skills gap.*
 - b. Describe the proposing institution’s qualifications and desires to work in the K-12 environment
 - c. Describe how the program will help participants learn and understand GenCyber program goals. How will the program further develop cybersecurity education at the K-12 level?
3. **Targeted Learners** (NOTE: diversity planning should be called out separately or clear through each section)
 - a. **Target Participants:**
 - i. Describe the participants you anticipate will enroll in the program. This must include information such as socio-economic status, gender, ethnicity, cybersecurity and computer science knowledge/experience, grade level(s), and prior GenCyber program participation.
 - ii. Justify the target number of participants. Include estimated demographic data.
 - iii. Anticipate the number of returning GenCyber participants you will accept. If you predict a high number of returning GenCyber participants, explain how you will adjust the camp schedule to this audience to ensure they are learning new and more advanced material.
 - iv. Include a description of program diversity goals
 - b. **Marketing/Recruiting:**
 - i. Describe how you will publicize and market your program to recruit the targeted participants.
 - ii. How will the program attract/recruit diverse participants? GenCyber aims to serve a diverse population in terms of ethnicity, race, gender, special needs, socio-economic status and/or geographic location. How will you tailor your marketing/recruiting to attract this population? Demographics of the area are not sufficient; there must be additional level of effort here.
 - c. **Selection/Enrollment/Retention:**
 - i. Describe the selection process of participants. Will participants need to be nominated? Is there an application process? What’s involved? Please be specific.
 - ii. Describe the retention plan to ensure that participant numbers are being met and maintained?
 - iii. How does the retention plan relate to your target audience? How will you ensure your diverse populations maintain interest? Your target audience, recruitment strategy, and retention strategy must all be interrelated and reflect a clear vision.
4. **Proposal Narrative Guidance – Student, Teacher, Combination, and Language Programs**
 - a. **Curriculum**
 - i. **Program Overview:** - Outline the program and describe how it will address GenCyber Program Goals, cybersecurity ethics, and GenCyber Cybersecurity Concepts.
 1. GenCyber Concepts: Each GenCyber Program must specifically state how the Concepts will be covered in the curriculum. The proposal must include how it will use the concepts as a foundation to the camp and outline how the lessons (e.g. cryptography, Python programming, drone hacking) are unified by the chosen curriculum concept(s). The Cybersecurity First Principles should be included, but

only as an addition to covering the Concepts.

- a. The curriculum **MUST** emphasize the explicit and implied relationship among different concepts and lessons. By having explicit conversations among topics, participants are more likely to leave the program where the “whole” of what they know now is greater than the sum of the parts.
2. Cybersecurity Ethics: Ethics is a critical part of cybersecurity. In order to ensure this understanding (and future practice) of GenCyber participants, it is imperative that cybersecurity ethics are also foundational to the curriculum and the implied and explicit relationship to each lesson should be apparent.
3. Post-secondary and Career Awareness: Explicitly describe how participants will be made aware of opportunities in the field of cybersecurity. Consideration of factors such as target audience and local cybersecurity landscape should be considered.
4. Proposed Pre/Post-Camp Outreach - Describe how the pre/post camp events will develop and/or continue engagement beyond the summer camp experience. How will outreach reinforce the goals of the GenCyber program? What partners are you able to facilitate relationships with in the local ecosystem?
- ii. **Learning:** Explain how the curriculum will facilitate a learner-centered classroom.
 1. Include curricula and instructional materials appropriately designed and presented for age-appropriate education. Examples of reliable technology used to augment the GenCyber goals include, but are not limited to: Raspberry Pi's, Spheros, Flash/Google drives loaded with software and/or activities, cyber ranges, and curriculum, curriculum frameworks, and K-12 resources for teacher participants.
 2. How does the proposed curriculum/activities relate to the target audience and address GenCyber program goals?
- iv. **Assessment:** Describe the process you will use to demonstrate that each participant has met the goals of the program. The classroom teacher uses formative assessments of student performance during the course of the lesson to adjust instruction as needed. This same philosophy must be used in a camp environment.
 1. How will you ensure that all participants (regardless of background and experience) will acquire new learning as a result of their participation in this program?
 2. How will participants receive feedback on learning after completing activities?
 3. How will participants be given opportunities to reflect on their learning experience?
 4. How will you ensure that teacher participants grow professionally as a result of their participation? What actions will help lead you to a higher Teacher readiness score?
- v. **Differentiation:**
 1. What methods of differentiation will you use for each activity?
 2. Will you have additional activities for participants that need additional challenges?
 3. How will you ensure that the feedback participants receive is actionable?
- vi. **Program Legacy:** Describe the connections you will and/or have established in your community as a result of the GenCyber program to grow interest among parents, local school systems, and other stakeholders in continued cybersecurity education at the local level.
 1. Describe how the program will foster continued cybersecurity awareness in the

- community.
2. Student programs may choose to describe items such as club developments, local community projects, increased enrollment in college/community college degree programs, etc.
 3. Teacher programs may describe ways in which your program helps teachers become GenCyber leaders through applied, practical or project-oriented activities or the development of Teacher Learning Communities.
 4. Include descriptions of community partners or the ways in which this GenCyber project has the potential to impact the local community. Institutions are encouraged to partner with other members of the local ecosystem to ensure continuity with or without GenCyber funding.
- vii. **Reflections** (*previous participants only*): List the challenges and recommendations provided in your 2020 or 2021 site visit report. If you did not have a site visit for one or both of these camps, please indicate any feedback received or any ways in which your camp staff made adjustments from the previous camp.

Recommendation/Challenge	How will you address each recommendation?
Recommendation 1	We will address recommendation 1 by...
Recommendation 2	We will address recommendation 2 by...
Recommendation 3	We will address recommendation 3 by...

- b. **Program Format**: Include a description of the program format. Be sure to include details on how the proposed format will accomplish GenCyber program goals.
- i. **Program Timeline**: (including detailed schedule) Include a clear and detailed timeline of proposed events (pre/post camp outreach + summer camp activity) including a brief description of the event and the format of the event. Include the number of instructional hours that will occur during each event.
 - ii. **Branding**: All activities funded under this grant must be branded as GenCyber activities. Institutions who receive funding are encouraged to use GenCyber branded items at their camp (and these items should be included in the budget). The proposal must acknowledge the requirement for GenCyber branding in the proposal narrative.
 - iii. **Safety Plan**: How will you ensure that all participants (students and teachers alike) can learn in a safe, secure environment for the duration of the program? Do you require certifications? Are staff trained, background checked, etc.?
 - iv. **Format Justification**: Why have you chosen the format for this camp? How will you overcome challenges? In the unlikely event that COVID is still a concern, do you have the ability to shift to a virtual format or take recommended precautions?
- c. **Program Personnel and Expertise**: Provide information on the personnel who will be charged with implementing your proposal. Each camp is required to have a designated Program Director and Lead Instructor, defining the duties and responsibilities between two different individuals. Each camp is also required to have a K-12 pedagogical expert on the camp staff to assist with curriculum development/review/delivery. This person must have K-12 classroom experience (including K-12 immersion experience if an immersion language camp.) Institutions must consider the target audience when selecting all camp staff. Proposals that include multiple camp administrators (who have little to no contact with participants) should not be considered as the purpose of the camps are to engage with target participants.
- v. **Program Director**: Provide Program Director's name, qualifications, major

responsibilities, and corresponding qualifications, experience, and/or training to teach camp coursework.

1. Overseeing all program activities
 2. Hiring and managing program staff
 3. Managing program recruitment
 4. Ensuring safety of participants
 5. Managing the program budget
 6. Coordinating learning plan development
 7. Remaining on-site for duration of program
 8. Identifying major responsibilities of the program director (staffing, budgeting, program evaluation, etc.).
 9. Connecting the program director's background and experience to the identified responsibilities (target language experience, experience with student populations, etc.).
- vi. **Lead Instructor:** *Provide Lead Instructor's name, qualifications, major responsibilities and corresponding qualifications, experience, and/or training to teach camp coursework.*
1. Developing the curriculum
 2. Planning and implementing professional development for program staff
 3. Leading the learning plan development
 4. Providing feedback to instructors
 5. Identifying major responsibilities of the instructional lead (curriculum development, learning plan development, teacher coaching, etc.).
- vii. **K-12 Pedagogical Expert:** **Provide K-12 expert's name, qualifications, and major responsibilities. K-12 experts should be involved in both curriculum planning and implementation. If a K-12 expert has not been named, please provide very detailed qualifications of what you are looking for and a timeline of hiring this person.** *(If competing to host a GenCyber language program, you should demonstrate the K-12 pedagogical expert's experience in best practices for immersion education in the target critical language.*
- viii. **Camp Staff:** *Describe the major responsibilities of the personnel in your program, and explain previous qualifications, experience, and/or training that qualifies them for their positions. Be certain that the connection between responsibilities and qualifications is clear.*
- ix. **Professional Development:** *Describe any professional development activities for the instructional staff – pre-program, during camp and/or post-camp.*

5. Proposal Narrative Guidance – Capacity Building Programs

a. Curriculum

- i. **Proposed Program Overview:** Outline the project and describe how it will address the GenCyber program goals, cybersecurity ethics, and GenCyber Cybersecurity First Principles and/or Concepts. If the program involves a virtual environment, describe how the proposed program will accomplish/advance the goals of the GenCyber program.
- ii. **Program Timeline:** Include a timeline of proposed project that includes development, implementation, and assessment phase.
- iii. **Learning:** Specify all content as it relates to lessons and activities and their relevance to the GenCyber Concepts or Principles. Include a discussion of how the project will further develop the K12 cybersecurity education ecosystem. Include specific examples to support the impact the project could have on a local area, the nation, or the GenCyber community.

- iv. **Assessment:** Describe the process you will use to show that the project has met the pre-determined impact goals.
 - v. **Program Legacy:** Describe the connections you will and/or have established in your community as a result of this GenCyber project to grow interest among participants at the K12 level. Describe how the program will foster continued cybersecurity awareness.
- b. **Program Personnel and Expertise:** Provide information on the personnel who will be charged with implementing your proposal. Each camp is required to have a designated Program Director and Lead Instructor/Project Lead, defining the duties and responsibilities between two different individuals. Each camp is also required to have a K-12 pedagogical expert on the camp staff to assist with curriculum development/review/delivery. This person must have K-12 classroom experience. Institutions must consider the target audience when selecting all camp staff. Proposals that include multiple camp administrators (who have little to no contact with participants) should not be considered as the purpose of the camps are to engage with target participants.
- i. **Program Director/Lead Instructor/Project Lead:** Provide Program Director and Lead Instructor's name, qualifications, major responsibilities, and corresponding qualifications, experience, and/or training to teach camp coursework. Lead Instructors must have experience as an instructor in a formal education setting – i.e., college classroom, K-12 classroom.
 - ii. **K-12 Pedagogical Expert:** Provide K-12 experts name, qualifications, and major responsibilities. K-12 experts should be involved in both curriculum planning and implementation. If a K-12 expert has not been named, please provide very detailed qualifications of what you are looking for and a timeline of hiring this person
 - iii. **Staff:** - Describe the major responsibilities of the personnel in your program, and explain previous qualifications, experience, and/or training that qualifies them for their positions. Be certain that the connection between responsibilities and qualifications is clear.
 - iv. **Guest Speakers:** Include a brief list of guest speakers and how he/she/they relate to and forward the GenCyber program goals
- iv. **Budget Supporting Information** – Institutions will upload the budget using the GenCyber online tool and include a written cost proposal. Only the written cost proposals should be included in the mailed paper copies. The purpose of a budget is to present and justify all expenses required to achieve your program objectives. All costs must be reasonable and allowable. The budget and justification must cover personnel, consultants, equipment, supplies, travel, and any other program expenses. Budgetary information shall be entered into the GenCyber Proposal Submission site through your account; and cover sheet budgetary information will be automatically calculated and populated. All information provided in the budget shall be found within the written cost proposal. Please be aware that if awarded a grant without an option, **there will be no period of performance extensions beyond the two-year timeframe.** Awards with an included option, may receive an additional year should the option be funded.

Your GenCyber budgets will be subject to rigorous scrutiny and may be subject to audit. Therefore, we strongly recommend that you be thorough in the development of your budget. It is mandatory that all sections are completed with the categories that suit your program's characteristics. An explanation of each item is required (written cost proposal). Leaving the explanation blank within the online proposal system and/or not explaining the cost in the written cost proposal may cause your budget to be rejected. Institutions are encouraged to itemize as much as possible and include descriptions and quotes as needed. Proposing institutions are encouraged to be as cost efficient as possible while also ensuring a safe, engaging, and fun experience for campers! If a proposal is selected for award, additional detailed quotes and budget justifications will be requested.

Please note that the following costs are **Not Allowed** and must not be included in proposals:

- Monetary gifts, gift cards, gift certificates and/or payments to attend camp for student participants.
- Gifted laptops (or devices of similar value) intended for **students** to keep after the program has ended.
- Proposal writing expenses.
- Any professional development conferences/meetings other than the GenCyber Spring and Fall Meetings.
- Deposits or fees intended to hold a seat or “save a spot” in the program and guarantee student’s attendance and/or program completion.
- Stipends for student participants (Regardless of the funding source).
- Travel allowances for student program participants except for daily local commuting. (Transportation for students should be done in the form of a prepaid pass or a bus rental fee. Student participants should not receive cash for transportation.)
- Course fees, certification textbook/exam fees, and/or tuition reimbursement. (Exceptions to this will be considered on a case-by-case basis. Please include justification if requesting these expenses.)
- Graduate student tuition reimbursement is not allowed under a GenCyber grant. Graduate students may be paid an hourly rate but GenCyber camps/events are not research projects nor are they teaching assignments.

Use the following guidelines when completing your budget items and written cost proposal:

Employees:

- Lists all employees working with your program who will be on payroll during the dates of the program.
- The program director, lead instructor, and K-12 pedagogy expert must be mentioned by name.
- You may refer to other employees by name or by listing “to be determined.”
- Show how you calculated the salary or rate for each employee.
- In order to support the reasonableness of the personnel costs proposed, in accordance with 2 CFR 200.404, the Government will require the Grantee to submit documentation validating all personnel salaries that are listed in the proposed budget (upon award).

Benefits:

- Employee payroll benefits.
- All benefit and benefit rates must be listed. Show and explain how you calculated each benefit.

Indirect:

- Indirect costs are actual costs incurred to conduct the normal business of an organization that is not readily identified with, or directly charged to, a specific project or activity. These costs are incurred for common or joint objectives and therefore cannot be readily identified with a specific project or activity of an organization.
- Typical examples of indirect costs are the costs of operating and maintaining facilities, local telephone service, and account services.
- Supporting documentation shall be provided in the form of a Department of Health and Human Services (DHHS) Rate agreement or any other previously negotiated for fringe benefits.

- If your organization does not have a federally negotiated rate, please use no more than a rate of 10%.
- *Insurance refers to additional coverage purchased specifically for the duration of the program.

Contracted Staff:

- Include any personnel who will work for your program and will not be on your institution's payroll during the dates of the program.
- Show the calculation and provide an explanation for each of the personnel listed. No benefits may be charged to the grant for contracted employees or consultants.

Travel:

- Include your estimated travel expenses pertaining to the GenCyber meetings. Attendance is mandatory for the program director and lead instructor. Budget for two individuals to attend three meetings in the Baltimore/Washington area.
- Institutions may elect to budget for ONE teacher participant to attend ONE fall meeting. This person does not replace the PD/LI attendance requirement.
- Additionally, list any other travel costs that are not related to the GenCyber spring and fall meetings.
- Field trips are allowed during the instructional day. Travel allowance for local commuting is permitted (i.e., providing a bus at a central location for students).
- Travel reimbursement for travel to a program site are only permitted for teacher programs as part of a stipend.
- Per diem costs may not exceed GSA rates for each location – rates can be found at <https://www.gsa.gov/travel/plan-book/per-diem-rates> and select 2021/22 fiscal year.

Facilities:

- In this category, list costs related to the rental of space for your GenCyber program.
- Classroom Rental
- Building Rental
- Describe the calculation of costs and provide an explanation for each item entered.

Supplies

- **Classroom:** This section shall detail the cost of any supplies or teaching materials that may be used in the classroom by the instructor. Please provide detailed information on the price and quantity of each item to be purchased.
 - Textbooks
 - Workbooks
 - Software / Educational Technology and Licenses
 - Games
 - Classroom Posters
- **Office and Administrative:** This section shall include all supplies regularly used to support the program. Please provide detailed information on the price and quantity of each item to be purchased.
- **Miscellaneous:**
 - Include any other supplies that will be purchased by the program that do not fit into any of the supply categories.
 - The expenses in this category need to be detailed. Please avoid general terminology such as "other."
 - When budgeting for the following, please note that the GenCyber Logo will be provided brand

- Participant T-Shirt
 - Completion Certificate
 - Promotional Item
 - USB Flash Drives
- v. **Certifications 2022** (2022 CEIO Grant Certifications)
- vi. **A-133 Audit Report** - A link may be uploaded to the GenCyber submission tool but the one-page A-133 Audit Report must be included in the hard copy application.
- vii. **Certificate of Liability Insurance**
- viii. **2022 Other:** Option year (if applicable). If applying for an option year, you should upload program information including number of camps participants, potential program dates, and curriculum (e.g., new participants, advanced program, other ideas, etc.) in this section (**2022 Other**). The Program Office may require more information on Option Year submissions. No information about the option year should be included in the Cover Page information for this proposal. Option years are not guaranteed.

2. **DEADLINES**

Institutionally approved, signed, completed proposals which include all items listed above must be **submitted via the proposal site on/before 10 December 2021. In addition, the two hard copy submissions (unbound, single-sided) of ALL required documents must be postmarked by the deadline.**

The entire proposal, containing all items listed above is to be mailed to:

GenCyber Program Office
Attn: A29, Suite 6810, Fanx 2
9800 Savage Road
Fort George G. Meade, MD 20755-6810

If you are having the package sent via commercial courier (FedEx, UPS, DHL, etc.), the package shall be delivered to the following address (**DO NOT HAND DELIVER** TO THIS ADDRESS OR TO 9800 SAVAGE ROAD):

NSA
1472 Dorsey Road, Door 1, 2 or 3
Hanover, MD 21076-6744 Attn: GenCyber Program Office, A29
Suite 6810 Phone: (410) 854-8994

3. **INCOMPLETE SUBMISSION**

Proposals submitted in the wrong format, using wrong forms, or missing required items will be deemed incomplete and will not be considered for an award.