

NSF 23-044

Frequently Asked Questions (FAQs) for NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) (NSF 23-527)

These frequently asked questions (FAQ) are categorized by overarching topic of interest in the following order:

- Financial Aid, Proposal Budget and Other Financial Aspects
- Eligibility
- Curricular and Co-Curricular Activities
- Research and Evaluation Components
- Miscellaneous

FINANCIAL AID, PROPOSAL BUDGET AND OTHER FINANCIAL ASPECTS

- 1. My institution has an active S-STEM project awarded under a prior solicitation. According to the NSF 23-527, S-STEM has increased the scholarship amounts to fifteen thousand per year (\$15,000) for undergraduate students. The maximum duration of the scholarship is now 5 years as opposed to 4 years. Are these new guidelines retroactive? Should we plan to increase the scholarship amounts to our current S-STEM scholars and ask NSF for a supplement?
- 2. How should an institution define low-income?
- 3. The annual scholarship amount for graduate students has been increased to \$20,000 per year, and the maximum duration of the scholarship has also changed to up to five years. How does one determine that a graduate student is low-income?
- 4. How should scholarships be used to meet students' unmet financial need?
- 5. My institution has a student who has a robust scholarship that covers tuition but not room and board or textbooks. For example, the institution's Annual Cost of Attendance (COA) is \$65,000 per year; the scholarship only covers \$40,000 per year; and the student is PELL eligible receiving \$5,000, with an Expected Family Contribution (EFC)

- of \$2,000 dollars. Is the student eligible for an S-STEM scholarship? How should the institution calculate the scholarship amount?
- 6. The cost of attendance at my institution is comprehensive of many items, such as textbooks, laptops, room and board. Because tuition at my institution is high and students have fewer sources of financial aid, the S-STEM scholarship will mostly cover tuition. Thus, all students are required to have a laptop and many low-income students cannot afford purchasing the laptop. They also cannot afford high speed Internet. Can I pay for these expenses and how?
- 7. Can the scholarship cover materials (such as textbooks, laptops and class supplies) in addition to tuition?
- 8. Can part of the scholarship be used to facilitate student transfer from one college to another?

ELIGIBILITY

- 9. How do I know that the disciplines of the degrees supported by my proposal are eligible disciplines funded by NSF? Is there a list? Does the NSF maintain a list of disciplinary fields that are eligible to receive research funding?
- 10. What are degrees that are always excluded from S-STEM?
- 11. Last year, our institution received an award to support students pursuing bachelor's degrees in physics, mathematics, chemistry, and biology. For this S-STEM solicitation, my institution wants to submit a proposal with the computer science and mathematics departments partnering for a data science minor. Is my institution eligible to submit this proposal this cycle?
- 12. Can the S-STEM scholarship support certificates if the students are enrolled full time in a bachelor's degree. For example, a data science certificate for a student pursuing a mathematics degree?
- 13. Are part-time students eligible?
- 14. Can the selection criteria for scholars give additional consideration to low-income students from underrepresented groups in STEM (i.e., African Americans, Hispanics, Native Americans, female students, students with disabilities, transfer students, etc.)?
- 15. Can each institution submit two proposals per track, or just two proposals total to any track?
- 16. My institution's business school offers coursework towards a B.S. or B.A. degree in Business Administration in computer information systems (or information technology) that has many STEM requirements. Is this degree eligible?

- 17. Can an institution submit two proposals with overlapping degrees if the target population of students is different (e.g., one targets transfer students and the other one targets juniors and seniors)?
- 18. How should I make the case that "the degrees pursued by students supported with S-STEM funds are within a disciplinary area of strategic national need for the economic competitiveness or national security of the United States?"
- 19. How should I make the case that "scholars will have positive job prospects with their earned undergraduate or graduate degrees?"
- 20. Undergraduate students in the degrees I want to support do not generally get STEM jobs after graduation, but they may if they pursue graduate degrees. Are those undergraduate degrees eligible?
- 21. How do I know if a degree in a discipline that used to be excluded from S-STEM eligibility is appropriate for funding with the new solicitation?

ABOUT CURRICULAR AND CO-CURRICULAR ACTIVITIES

- 22. What types of scholar activities can be required from scholars and what can we do to encourage participation in those that cannot be? Is lack of participation a cause for dismissal?
- 23. Can undergraduate research be required as part of the commitments a student makes to receive the scholarship? Are research experiences for undergraduates encouraged?
- 24. I am proposing a project to support research-focused graduate students (M.S. and Ph.D.). Can these students be expected to work in a lab as part of their scholarship expectations? Is this scholarship the same as a Graduate Research Assistantship?

EVALUATION AND RESEARCH COMPONENTS

- 25. Are Evaluation and Research still required in every S-STEM grant? What is the difference between evaluation and research?
- 26. What do you mean by "external" evaluator? Are there expectations as of what percentage of the budget should be allocated for evaluation?

MISCELLANEOUS

- 27. Does the program prefer to have scholars from multiple disciplines rather than scholars from one discipline only (e.g., chemistry, biology, math, physics vs. mechanical engineering only)?
- 28. The duration of the scholarship has been extended to 5 years per degree or institution. What does that mean for students at community or 2-year colleges?

FINANCIAL AID, PROPOSAL BUDGET AND OTHER FINANCIAL ASPECTS

1. My institution has an active S-STEM project awarded under a prior solicitation. According to the NSF 23-527, S-STEM has increased the scholarship amounts to fifteen thousand per year (\$15,000) for undergraduate students. The maximum duration of the scholarship is now 5 years as opposed to 4 years. Are these new guidelines retroactive? Should we plan to increase the scholarship amounts to our current S-STEM scholars and ask NSF for a supplement?

No, the change in scholarship maximum and duration is not retroactive. Unfortunately, the legislation that authorized the NSF director to increase the cap for S-STEM scholarships was issued in 2022 and governs only awards made to proposals submitted to NSF 23-527 in FY 23 and subsequent years.

2. How should an institution define low-income?

The definition of low-income is up to the institution and should be specified in a letter from the institution's Office of Financial Aid (included as a supplementary document). The definition can use Pell-eligibility, the regional poverty level, median household income, or other metrics that are appropriate.

3. The annual scholarship amount for graduate students has been increased to \$20,000 per year, and the maximum duration of the scholarship has also changed to up to five years. How does one determine that a graduate student is low-income?

For graduate students, the definition of low income must be determined by the proposing institution's Office of Financial Aid as well. In many cases, graduate students do not complete the FAFSA form. It is up to the institution to devise a mechanism to check for eligibility. Some institutions ask candidates to submit proof of their total income, such as income taxes. Other mechanisms to collect this information are also possible, and NSF does not mandate or interfere with institutional policy in that regard. An important aspect here is to determine when graduate students are independent from the income of their parents. Some U. S. Department of Education guidelines state that, in general, students who are older than 24 years of age by the time the scholarship is granted and have filed separate income tax returns from their parents for at least two years prior to the application date, are considered independent. Also, students who are married, are head of the family, have children of their own, or are veterans are generally considered independent. For those students deemed independent, their reported

income (not including the income of their parents) can be used to establish eligibility

4. How should scholarships be used to meet students' unmet financial need?

S-STEM is a last-dollar scholarship, which means that the Office of Financial Aid should calculate the unmet need of each student after other scholarships, grants, and fellowships are awarded and applied towards the Cost of Attendance. Loans and income from work should be excluded. S-STEM should cover any remaining unmet need up to the Cost of Attendance, which is defined by each institution, not exceeding \$15,000 per undergraduate student per year and \$20,000 per graduate student per year. As a last-dollar scholarship, selection as an S-STEM Scholar should not be used by institutions to reduce other awards that the student is eligible to receive.

5. My institution has a student who has a robust scholarship that covers tuition but not room and board or textbooks. For example, the institution's Annual Cost of Attendance (COA) is \$65,000 per year; the scholarship only covers \$40,000 per year; and the student is PELL eligible receiving \$5,000, with an Expected Family Contribution (EFC) of \$2,000 dollars. Is the student eligible for an S-STEM scholarship? How should the institution calculate the scholarship amount?

Assuming the institution's definition for low income is PELL eligibility, the student meets the established low-income definition. If the student is pursuing an eligible STEM degree covered in the original proposal, is considered a promising or talented student, and meets the citizenship status eligibility criteria, the student is eligible to receive an S-STEM scholarship since there is still unmet need despite their other scholarships and grants. The calculations for this student would be as follows:

COA – EFC – Other Grants and Scholarships = Unmet Need. In this case: \$60,000 - \$2000 - (\$5000 + \$40,000) = \$13,000. Therefore, this student is eligible to receive an annual S-STEM scholarship of \$13,000 per year. This last dollar scholarship may fully cover the remaining unmet COA.

6. The cost of attendance at my institution is comprehensive of many items, such as textbooks, laptops, room and board. Because tuition at my institution is high and students have fewer sources of financial aid, the S-STEM scholarship will mostly cover tuition. Thus, all students are required to have a laptop and many low-income students cannot afford purchasing the laptop. They also cannot afford high speed Internet. Can I pay for these expenses and how?

Yes, a project can pay for additional items when they have already awarded the full scholarship to the cap (\$15,000 per year for undergraduate students and \$20,000 per year for graduate students). These additional aids, however, cannot use the 60% pure scholarships line of the budget (line F1). Additional supports, such as these, can be

provided using the 40% of remaining funds in the budget if needed.

7. Can the scholarship cover materials (such as textbooks, laptops and class supplies) in addition to tuition?

The S-STEM scholarship covers Cost of Attendance (COA) up to fifteen thousand dollars (\$15,000) per year for undergraduate students and twenty thousand dollars (\$20,000) per year for graduate students. Each institution defines what its COA includes, but most include more than tuition costs, such as textbooks, a laptop computer, room and board, transportation, etc. Some institutions even have allowances for childcare and other necessities. Any items incorporated in the definition of COA may be supported with S-STEM scholarship funds.

8. Can part of the scholarship be used to facilitate student transfer from one college to another?

If the cost of transfer is not part of the COA, then proposers can cover those costs with the 40% of the project budget that is not devoted to scholarships. Students must be enrolled officially in one of the colleges and pursuing an eligible STEM degree.

ELIGIBILITY

9. How do I know that the disciplines of the degrees supported by my proposal are eligible disciplines funded by NSF? Is there a list? Does the NSF maintain a list of disciplinary fields that are eligible to receive research funding?

No, there is not list of degrees per se. The NSF website is a good source of information. Each directorate maintains a web page that describes their research programs: https://www.nsf.gov/about/research_areas.jsp. Proposers are encouraged to examine current NSF research programs and/or recent awards to determine if their focus suggests reasonable alignment with the focus and curriculum of the degree programs that would be included in an S-STEM proposal. Please note that clinical fields, degrees in business administration at all levels, and students pursuing STEM teacher certification/licensure (regardless of degree program) are not eligible.

10. What are degrees that are always excluded from S-STEM?

As the solicitation states, all clinical fields are excluded, including but not limited to nursing, medicine, veterinary medicine, and other health or medically-oriented degrees such as pharmacy, public health, physical therapy, clinical psychology, nutrition, counseling, occupational therapy, etc. There are programs at other mission-oriented agencies that may support those. Also, degrees that are awarded in business of any type or concentration, such as B.S. in Business Administration, MBAs etc. Also, students pursuing teacher licensure, regardless of degree program, are not eligible to

receive S-STEM funding.

11. Last year, our institution received an award to support students pursuing bachelor's degrees in physics, mathematics, chemistry, and biology. For this S-STEM solicitation, my institution wants to submit a proposal with the computer science and mathematics departments partnering for a data science minor. Is my institution eligible to submit this proposal this cycle?

NSF checks for the compliance of the restriction limiting overlaps in the majors at the degree level. Its systems check the table in supplementary documents that names the degrees supported by the proposal. For example, if the proposal awarded last year supports students pursuing a B.A. in Mathematics and the new proposal supports students with a B.S. in Data Science or Computer Science, there is no overlap. Now, if the new proposal supports students pursuing a B.A. in Mathematics and a B.S. in Computer Science, and scholars will get a minor in Data Science, then there is an overlap at the degree and major level. Hence, the proposal would be returned without review, and proposers would need to wait until the third anniversary of the current award to submit a new proposal with overlapping degrees.

12. Can the S-STEM scholarship support certificates if the students are enrolled full time in a bachelor's degree. For example, a data science certificate for a student pursuing a mathematics degree?

No. Congress has designated the S-STEM scholarship as one supporting the attainment of Associate, Bachelors, Masters or Ph.D. degrees only. So, scholarship funds can only pay for the Cost of Attendance for a student enrolled in those degree programs. However, as part of enrichment co-curricular activities, a project can support registration in certificates if using the 40% remaining funds in the budget, but not as part of the scholarship.

13. Are part-time students eligible?

Yes, part-time students are eligible as long as they are enrolled and take at least 50% of what the institution considers being a full-time load and are pursuing an eligible degree and making acceptable academic progress.

14. Can the selection criteria for scholars give additional consideration to low-income students from underrepresented groups in STEM (i.e., African Americans, Hispanics, Native Americans, female students, students with disabilities, transfer students, etc.)?

No. The legislation restricts eligibility, beyond citizenship status, to being low-income, with unmet need and academically talented, pursuing an eligible STEM field. All

students who qualify should receive equitable consideration to receive a scholarship, regardless of gender, race, ethnicity or disability status. The selection criteria can include other holistic metrics of academic talent defined by the proposers but should not consider demographic characteristics. Proposers can, however, carry out targeted outreach to specific communities to encourage applications from those groups.

15. Can each institution submit two proposals per track, or just two proposals total to any track?

An institution may submit a total of two proposals across Tracks 1, 2 and 3 in any submission year. Planning Grants for future Track 3 proposals do not count towards this limit.

16. My institution's business school offers coursework towards a B.S. or B.A. degree in Business Administration in computer information systems (or information technology) that has many STEM requirements. Is this degree eligible?

Business school programs that lead to Bachelor of Business Administration or Bachelor of Arts or Science in Business Administration degrees (BABA/BSBA/BBA) are not eligible for S-STEM funding. However, if, for example, the degree awarded is a BS in Information Technology or Information Systems, the degree could be eligible even if housed at business school.

17. Can an institution submit two proposals with overlapping degrees if the target population of students is different (e.g., one targets transfer students and the other one targets juniors and seniors)?

No. The restriction refers to overlapping disciplines of the degrees offered to those students, not to the matriculation status of students pursuing the same degree. If an institution submits two proposals targeting the same degrees or with some overlapping, one of the proposals will be returned without review.

18. How should I make the case that "the degrees pursued by students supported with S-STEM funds are within a disciplinary area of strategic national need for the economic competitiveness or national security of the United States?"

Evidence of strategic national need can be provided by reports on areas of necessary growth in workforce sectors that require STEM knowledge. Other arguments and sources of data are also admissible. The burden of proof is on the proposers. Therefore, all proposals must include a supplemental document of no more than one page to provide such evidence (see the supplemental documents section in the solicitation) and may also elect to depict the national need in the Project Description. The 1-page supplemental document should address all disciplines covered in the proposal.

19. How should I make the case that "scholars will have positive job prospects with their earned undergraduate or graduate degrees?"

The solicitation suggests data sources that proposers could use to make a case for the need of professionals with degrees similar to those to be obtained by the S-STEM scholars in their proposals. However, those sources are not exhaustive. The number of job openings (regionally or nationally); the number of H1-B visas obtained by foreign workers to cover openings in certain disciplines or professions; reports about future needs for the country in certain areas; and other such data could also provide evidence of positive job prospects.

20. Undergraduate students in the degrees I want to support do not generally get STEM jobs after graduation, but they may if they pursue graduate degrees. Are those undergraduate degrees eligible?

An argument of this type may be acceptable and should follow the guidelines already given. It is important that such an argument provides the likelihood that a scholar would enter graduate school in a certain eligible field and subsequently have positive job prospects in the STEM workforce.

21. How do I know if a degree in a discipline that used to be excluded from S-STEM eligibility is appropriate for funding with the new solicitation?

NSF's current S-STEM solicitation (NSF 23-527) allows for some previously excluded undergraduate and graduate degrees, which are typically funded by NSF in other programs (see research areas funded by NSF on NSF's website: https://www.nsf.gov/about/research_areas.jsp.), to be eligible for S-STEM. This includes some degrees in social and behavioral sciences. but for such degrees to be considered, it is incumbent upon the proposers to demonstrate clearly:

- 1. The program is not clinical, does not lead to a business degree, and scholars are not pursuing teacher licensure.
- 2. There is a national or regional workforce need for this particular degree that is clearly communicated in a way to make an argument at all stages of the merit review process (e.g., with review panelists who may or may not have experience in this space, NSF program officers, etc.)

ABOUT CURRICULAR AND CO-CURRICULAR ACTIVITIES

22. What types of scholar activities can be required from scholars and what can we do to encourage participation in those that cannot be? Is lack of participation a cause for dismissal?

Congress established that the scholarship cannot be given in exchange for work or for required participation in any activity that is not conducive to degree attainment. Participation in activities that are part of the regular academic curriculum of a scholar and required for graduation is expected. Activities that benefit scholars but that are not part of their regular academic program can be encouraged but failure to participate cannot be used as grounds for scholarship discontinuation. Given the possibility of additional responsibilities for scholars (e.g., need to work, parenting), proposers are further encouraged to design and schedule activities to allow for flexible participation. The only factor that can be the basis for dismissal from the S-STEM program is lack of academic progress, according to the parameters established by the proposing institution in the proposal.

23. Can undergraduate research be required as part of the commitments a student makes to receive the scholarship? Are research experiences for undergraduates encouraged?

Research experiences for undergraduate students are linked to retention in the literature, and are encouraged by the S-STEM program, if appropriate for the context of the project. However, Congress has determined that students cannot be asked to perform additional activities in exchange for the scholarship. As long as scholars are making academic progress towards their degree, their scholarship cannot have requirements that would otherwise be construed as required work. The one exception being when research is required for the attainment of the degree (e.g., research for Ph.D. students). Proposers can and are encouraged to include paid summer or academic year experiences for students. These enrichment activities must be paid from the 40% of funds not allocated as part of the scholarships. In other words, S-STEM scholarships are not a substitute for REU Site awards.

24. I am proposing a project to support research-focused graduate students (M.S. and Ph.D.). Can these students be expected to work in a lab as part of their scholarship expectations? Is this scholarship the same as a Graduate Research Assistantship?

For graduate students pursuing a degree for which a final research paper, thesis or dissertation is expected, the requirement to make progress in their research work is appropriate. While the scholarship is not a substitute for a GRA, the expectation that students work in a lab towards progress in their own research work is acceptable as this is required to make progress towards graduation.

EVALUATION AND RESEARCH COMPONENTS

25. Are Evaluation and Research still required in every S-STEM grant? What is the

difference between evaluation and research?

Education or Social Science Research plans are not required for Planning Grants, Track 1, or Track 2 S-STEM proposals. Track 3 proposals, however, must incorporate a research plan. All proposals, except Planning Grants, must include an evaluation plan.

Evaluation plans focus on the execution of the project (formative) and can glean lessons from the successes and challenges that are encountered. A logic model or theory of change is required, and both are good ways to convey the evaluation plan.

Research plans should be grounded in a social sciences or education research theoretical framework that will allow the results to be relevant beyond the immediate context of the project. Sections stating clear research questions and methodological approaches to answer those questions are required in the research plan for Track 3 proposals.

26. What do you mean by "external" evaluator? Are there expectations as of what percentage of the budget should be allocated for evaluation?

S-STEM requires an evaluation report to be uploaded together with the regular award's annual report every year. This evaluation report should be formative in nature in the first years of implementation and summative in the final year. The external evaluator needs to assess the extent to which the project's goals are being met and provide formative feedback to the project leadership team. The objective of the formative feedback is to course correct any problems. Hence, the external evaluator is expected to be an independent, objective, and unbiased assessor of the project. This independence can only be accomplished by someone who is not attached to the project as PI or senior personnel or report to the PI team in any direct way. Regarding reasonable budget allocation, it varies. Depending on the scope of the project, the time commitment per year will also vary. NSF wants to see clear justification for time commitment and subsequent budget allocation for the evaluation component. External evaluators need to establish their hourly rate and how many hours they are dedicating to the project. Depending on whether the evaluator is a member of the institution's staff or an independent consultant, budget requirements can vary. A rule of thumb we have observed in many successful projects is that the evaluator charges around 2-5% of the total budget. The range varies with the scope: from small single institution projects to large multi-institution implementations with travel involved.

MISCELLANEOUS

27. Does the program prefer to have scholars from multiple disciplines rather than scholars from one discipline only (e.g., chemistry, biology, math, physics vs. mechanical engineering only)?

The S-STEM program does not have a preference, but the solicitation requires the formation of cohorts of scholars to support each other along their academic journeys. There is evidence that peer support structures, besides faculty mentors and other cocurricular activities, improve the likelihood of low-income scholar retention and success. Cohort formation assures scholars have peers to study and share concerns and experiences with. It is easier for proposers to demonstrate that a cohort will be formed if students start together taking classes together and progress as a cohort than when students take different courses from start. Yet, there are projects that have demonstrated that they can form a cohort with scholars from different disciplines supporting each other. The burden to convince the panel that cohort formation is possible is on the proposer.

28. The duration of the scholarship has been extended to 5 years per degree or institution. What does that mean for students at community or 2-year colleges?

Congress authorized NSF to extend the duration of a scholarship to a maximum of 5 years per degree. In theory, a scholar pursuing an associate degree in an eligible discipline could receive a scholarship for that many years. However, other parts of the legislation require students to make progress towards degree attainment to be eligible to receive the scholarship. Therefore, it would be rare that a full-time student takes that long and is still eligible. However, it could happen if a student is attending only part time (50% of the time is the minimum to receive a scholarship).