

NSF 22-037

Frequently Asked Questions (FAQs) for NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) (NSF 22-527)

- 1. 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?"
- 2. How should I make the case that "scholars will have positive job prospects with their earned undergraduate or graduate degrees?"
- 3. 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?
- 4. 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?
- 5. What are degrees that are always excluded from S-STEM?
- 6. Our 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?
- 7. 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?
- 8. How should an institution define low-income?
- 9. How should scholarships be used to meet students' unmet financial need?
- 10. Can the scholarship cover materials (such as textbooks and class supplies) in addition to tuition?
- 11. Can part of the scholarship be used to facilitate student transfer from one college to another?

- 12. Are Evaluation and Research still required in every S-STEM grant? What is the difference between evaluation and research?
- 13. Can each institution submit two proposals per track, or just two proposals total to any track?
- 14. 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)?
- 15. 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)?
- 16. Can the selection criteria for scholars give additional consideration to low-income students from underrepresented groups in STEM (e.g., African Americans, Hispanics, Native Americans, female students, students with disabilities, etc.)?
- 17. 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?
- 18. What types of activities or associations might indicate that a potential external evaluator could be insufficiently external to a proposed project?
 - 1. 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. All proposals must include a Supplementary Document of no more than one page to provide such evidence (see instructions for Supplementary Documentation in Section V.A of the solicitation) and may also elect to discuss national need in the Project Description section of the proposal. The one-page Supplementary Document should address all disciplines covered in the proposal.
- 2. 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 Principal Investigators (PIs) 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.

3. 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. Proposers are encouraged to examine current NSF research programs and/or recent awards to determine if their focus suggest reasonable alignment with the focus and curriculum of the degree programs that would be included in an S-STEM proposal. The NSF website is a good source of information. Each NSF Directorate maintains a web page that describes their research programs: https://www.nsf.gov/about/research_areas.jsp. 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.

4. 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.

5. 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, physical therapy, clinical psychology, nutrition, counseling, occupational therapy, etc. Degrees that are awarded in business of any type or concentration, such as B.S. in Business Administration, MBAs etc. are also excluded. In addition, students pursuing teacher licensure, regardless of degree program, are not eligible to receive S-STEM funding since scholarships for pursuing teacher licensure are covered by the Robert Noyce Teacher Scholarship program (NOYCE).

6. Our 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 Arts or Science in Business

Administration degrees (BABA/BSBA/BBA) are not eligible for S-STEM funding. If, for example, the degree awarded is a BS in Information Technology or Information Systems, the degree could be eligible.

7. 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 22-527) 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), 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.)

8. 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 Financial Aid (included as a Supplementary Document). The definition can use Pell-eligibility, the regional poverty level, or other metrics.

9. 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 (COA). Loans and income from work should be excluded. S-STEM can cover unmet need up to the COA, which is defined by each institution, not exceeding \$10,000 per 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.

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

The S-STEM scholarship covers COA up to \$10,000 per student per year. Each institution defines what its COA includes, but most include more than tuition costs, such as textbooks, a laptop computer, housing, transportation, etc.

11. 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.

12. Are Evaluation and Research still required in every S-STEM grant? What is the difference between evaluation and research?

Research activities are not required for Collaborative Planning Grants, Track 1, or Track 2 S-STEM proposals. Track 3 proposals must incorporate a research plan. All proposals except Collaborative 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 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.

13. 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. Collaborative Planning Grant proposals for future Track 3 proposals do not count towards this limit.

14. 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 type of students. If an institution submits two proposals targeting the same degrees or with some overlapping, one of the proposals will be returned without review.

15. 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. There is evidence that peer

support structures, besides faculty mentors and other co-curricular 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 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.

16. Can the selection criteria for scholars give additional consideration to low-income students from underrepresented groups in STEM (e.g., African Americans, Hispanics, Native Americans, female students, students with disabilities, 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.

17. 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 in the proposal by the proposing institution.

18. What types of activities or associations might indicate that a potential external evaluator could be insufficiently external to a proposed project?

In general, any professional or personal relationship that could compromise the evaluator's ability to give critical feedback to the PI or project team would be problematic. Proposers are encouraged to carefully consider all potential conflicts that

could impact the fidelity of the project evaluation process. For instance, any activity or association that would result in the evaluator being listed on the Collaborators and Other Affiliations (COA) documentation for any project PI or co-PI would be disqualifying, as would the evaluator holding an appointment in the same department as a project PI, co-PI, or Senior Personnel. External evaluators cannot be co-PIs listed on the project cover sheet. The idea is that external evaluators should be independent from the execution of the project.