# Caribbean Science Foundation



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# **Student Program for Innovation in Science and Engineering (SPISE)**

## FREQUENTLY ASKED QUESTIONS ABOUT THE SPISE

1. What is the Student Program for Innovation in Science and Engineering (SPISE)?

The Student Program for Innovation in Science and Engineering (SPISE) is an intensive four-week enrichment residential summer program designed for promising high-school students from the Caribbean who are at least age 16 but less than age 18 on July 1 of the current year, and are interested in exploring careers in science and engineering. The goal is to help address the low numbers of Caribbean students pursuing advanced degrees and careers in science and engineering, and to help develop the next generation of technology leaders in the Region.

### 2. What is the SPISE environment?

SPISE is a learning environment in which students are trained to think logically and critically, and to develop analytical and logical problem-solving approaches in several disciplines. Rote learning is discouraged. Thus, while getting the correct answers to problems and questions is important, critical and logical thinking, robust methodology, and analytical problem-solving approaches are more highly valued in SPISE. The focus is on understanding the concepts and fundamental principles in each discipline, and on gaining enough mastery to apply these fundamentals to find solutions to complex problems that have not been encountered before.

SPISE, therefore, provides a risk-free learning environment in which students are encouraged to have no fear, insecurity or hesitation in asking questions. That is, there is no penalty for statements such as "I do not know" or "I do not understand", and there is no such thing as a stupid question. Since there is minimal competition between students, students naturally help each other to learn and understand the material, and are continually encouraged to do so.

Team work is another essential component of the SPISE experience, as all of the hands-on projects (robotics, electronics/renewable energy, entrepreneurship, and computer programming) require students to work in groups, and to design and fabricate modules, components and systems for a final project that is showcased to the public at the end of the program. Students participate with the understanding that the project goal, and not individual egos, must take top priority.

- 3. Are students required to participate in SPISE for the entire four weeks?
  - Yes. If a student is not sure she or he can stay in the program for the entire four weeks, then that student should not apply. Our precious funding is very limited, and both the sponsors of the students and the CSF want to make sure that our resources are effectively and efficiently used to provide maximum benefit to the Region.
- 4. Where will students be staying during the program and what supervision provisions does CSF have in place? All students will be living in Frank Worrell Hall on the UWI Cave Hill, Barbados Campus for the duration of the program. Students will be supervised and chaperoned at all times (24/7) by Teaching Assistants who will be living also in Frank Worrell Hall, in close proximity to the students.

### 5. What is the waitlist?

Each year, because of insufficient funds, the CSF offers conditional acceptance to a few highly qualified students for whom we do not yet have sponsorship. The students are placed on a "waitlist" and then the CSF works very hard to secure sponsorship for these students. We realize that this places some uncertainty in the lives of the wait-listed students, so wait-listed students have the option to remove themselves from consideration at any time.

6. How much does it cost to participate in SPISE?

The SPISE is free for most participants. The only possible cost to participants is for travel to and from Barbados, if the sponsor does not cover this cost. The cost to the sponsor is US\$ 6000 plus round trip airfare between the student's country and Barbados. Transportation costs between the Barbados airport and the UWI-Barbados campus will be covered by the CSF. All meals are provided for the students.

7. Can I assist with finding my own sponsorship?

First, you would have to be notified by the CSF of your successful admission to the program or of your placement on the waitlist for admission pending sponsorship. Then all your activities to help us secure sponsorship for your participation must be done in collaboration with the CSF headquarters.

8. Can my parents cover my sponsorship?

Parents who are able to provide the cost of sponsorship are encouraged to do so if their daughter or son is offered admission or is waitlisted. The CSF will first assist the most-needy students with its very limited funds.

- Do I have to pay my own roundtrip airfare to Barbados?
   Most likely yes. Some of our sponsors unable to cover airfare.
- 10. What are the transportation arrangements for the students between the Barbados airport and their accommodations?

Upon arrival at the Barbados airport, each student will be met at the airport by a Teaching Assistant who will accompany them to their accommodations by taxi. Similarly, at the end of the program, each student will be escorted to the Barbados airport by a Teaching Assistant.

- 11. What should I do if my recommenders have not sent in their letters of recommendation by the due date? You should remind your recommenders to urgently e-mail their letters to the CSF so that we receive them within 1 week after the deadline. Your application will not be evaluated if it is incomplete. The SPISE request for letter of recommendation which includes guidelines for recommenders can be found at http://caribbeanscience.org/spise/. Please share this information with your recommenders.
- 12. Who can apply to the SPISE Program?

SPISE is open to high school students who are citizens or permanent residents of the English-speaking Caribbean (excluding U.S. territories), are at least age 16 but less than age 18 on July 1 of the current year, and have been enrolled in a high school within the Caribbean for the past 4 years. The program is also open to students from Bermuda. Applicants from the Dutch, French and Spanish-speaking Caribbean countries may be considered on a case-by-case basis. Students may be enrolled in a public or private school or be homeschooled. Students from all economic backgrounds can apply to the SPISE. Girls are especially encouraged to apply. Students from U.S. territories in the Caribbean are eligible for and should apply to the MITES program at MIT (<a href="https://oeop.mit.edu/programs/mites">https://oeop.mit.edu/programs/mites</a>).

13. I do not have a passport. Can I still apply?

If your student application form is submitted on or before the March 31 application deadline, the absolute latest date we will accept missing supporting documents (such as passport certification, letters of recommendation, transcripts, etc.) is one week after the application deadline.

14. I am interested in a career in medicine. Can I apply?

Consistent with the mission of the CSF to assist with the diversification of the economy of Caribbean countries, SPISE by design is more geared to assisting students interested in science and engineering than students interested in other disciplines such as medicine. Thus, while students interested in pursuing careers in medicine may apply, admissions preference will be given to students interested in science and engineering careers, all other factors being equal.

- 15. I am homeschooled and am essentially doing the work of a 5th former. Can I apply?

  You must submit documentation of your current curriculum to the SPISE program, proving that you are recognized as a 5th former. These documents must be sent along with your application.
- 16. I have applied for citizenship and expect to be a Caribbean citizen by the start of the program. Can I apply to SPISE?

You must have proof of your Caribbean citizenship or permanent residence when you apply to the SPISE. If you are still in the process of obtaining your CARICOM citizenship or permanent residence at the time of applying, you are ineligible for the program.

- 17. I am not a citizen or a permanent resident of the Caribbean, but I have spent several years in the Region enrolled in Caribbean schools. Can I apply to the SPISE program?

  To be eligible for SPISE, you must show proof that you have been enrolled for the previous 4 continuous years in a school in the Caribbean at the time you submit your application.
- 18. I am a US citizen. Can I apply to the SPISE program?
  US citizens are eligible and are encouraged to apply to the MITES program at MIT. SPISE is a clone of the MITES program. The website for the MITES program is http://web.mit.edu/mites. Caribbean citizens are ineligible for the MITES program at MIT. US citizens may apply to SPISE if they have been enrolled for the previous 4 continuous years in a school in the Caribbean at the time of application submission.
- 19. I am a citizen of the UK, and at least one of my parents is a Caribbean citizen. Can I apply to the SPISE program?
  CADSTI-UK has negotiated a special agreement with the CSF, so that you are eligible to apply to SPISE if you meet the age requirement.
- 20. I will be enrolling in a university in the fall, am I still eligible to apply?

  Yes, you are still eligible to apply, but preference will be given to students who have not yet been accepted at a university.
- 21. My current term grades will not be released by the application deadline. What should I submit?

  Please send us your previous term grades if you cannot give us your current term grades by the deadline.

  Then send us a copy of your current term grades as soon as you receive them. Officially signed grades should be e-mailed in PDF format to csfhdq@gmail.com and must reach the CSF within 1 week after the deadline to be considered as part of your application.
- 22. I will be taking my CSEC, CAPE/Associate Degree, or SAT exams just before the application deadline. Can I still apply to the SPISE Program?
  Yes, you may still apply. All application materials must be e-mailed by the deadline. If possible, you should schedule your exam so as to receive your scores by the deadline. However, we will accept results from exams if they reach the CSF by e-mail within one week after the deadline. We do not accept test scores for exams scheduled after the deadline.
- 23. In my country we do not take the CSEC, CAPE or SAT exams. Can I still apply?

  Yes, you may still apply. However, you must send enough supporting information along with your grades/scores so we can compare the exams you have taken with the CSEC, CAPE and SAT exams.
- 24. Can I send in extra letters of recommendation that I feel will make my application stronger?

  Due to the expected high volume of applications, we are unable to accept extra letters of recommendation.
- 25. I do not have a guidance counselor. May I request a letter of recommendation from another teacher? If you do not have a guidance counselor, please request this letter from someone in your school administration who can discuss the information requested (e.g., your school's Assistant Principal or Principal).

- 26. I do not know my Guidance Counselor or Principal well. Can I get a recommendation from someone else? Yes. However, you must provide us with your relationship with this person, and their recommendation should speak specifically to your character, intellectual capacity, motivation and passion for science and engineering, and qualifications for the SPISE.
- 27. Do my letters of recommendation have to come from my current math or science teacher?

  Your letters of recommendation must come from your current math and science teachers, or math and science teachers from the previous year.
- 28. I do not have a math or science teacher this term. What should I do?

  If you do not have a science or math class this term, please ask a science or math teacher from last term or last year to provide your letter of recommendation. We must have a letter of recommendation for each for these two subject areas.
- 29. I was not able to submit my application by the deadline. Can I still turn it in?

  All applications must be submitted electronically by the application deadline. If you have missed the deadline, you should contact the CSF office at csfhdq@gmail.com.
- 30. When will I find out whether or not I was accepted into the SPISE?

  Decisions for SPISE will be communicated to applicants around May 15. You may receive a request for an interview via Skype prior to the decision on May 15.
- 31. Will I receive secondary school or college credit or grades if I participate in SPISE?

  Although there will be homework, quizzes and exams, the grades received will not count for secondary school or university credit. All students will receive both qualitative and quantitative evaluations during SPISE, as well as final evaluations at the end of the program. Upon request, the SPISE faculty will provide letters of recommendation for your future university and scholarship applications in which they will comment on your SPISE performance.
- 32. Can students drop any classes in SPISE?

  No classes can be dropped. Students must stay with all of their classes for the duration of the four-week program.
- 33. How much homework are students given?

The amount of homework in each course is determined by the instructor of that course. In addition, the core courses (calculus, physics, and biochemistry) will also have final exams. The hands-on courses require students to work in groups and to design and fabricate modules, components and systems for a final project that is showcased to the public at the end of the program. Homework for these courses is much less, although thoughtful design can be time consuming. The entrepreneurship class has a team project component as well. On average, students should expect to have about 5 hours of homework every evening.

- 34. Will I have any free time during the SPISE?
  - SPISE includes time for classes, eating, studying, special seminars during the week, and planned activities on Saturday afternoons. During the week, students are in class (including lab) from 9 am to approximately 5 pm. On Saturdays, students have classes in the morning and planned activities in the afternoon. Students will have some time to relax and study on Sundays.
- 35. I am a practicing Jewish or Seventh Day Adventist student and observe Saturday as the Sabbath. Will provision be made for me if I attend SPISE? Will I be able to make up any missed classes?

  Classes are held on Saturday mornings until 12:00, after which there are scheduled student group activities and tours. At this early stage, the resources of the CSF are too limited to: (a) assign chaperones for students with special needs who cannot participate in the activities of the group, or (b) cover the additional expenses associated with having students make up missed classes.

36. Can I leave the premises to visit friends/family/attend church/social activities?

You may leave the premises only if your parent or guardian sends an email or signed letter to CSF detailing who you are going to visit, the time you expect to be off the campus, and the name and contact information of the adult who will pick you up from and return you to the campus, and if approval is granted by the Executive Director or Co-Executive Director of the CSF. You should not plan to be away from the campus during scheduled class or activity time, or for extended periods of time on the weekend (e.g. more than approximately 4 hours).

37. Can SPISE be compared to a sleep-over summer camp?

**SPISE** is **NOT** a summer camp. Students should not apply unless they are mentally and physically prepared to be intensively immersed in challenging and rigorous course work for four weeks. Every student will be challenged just outside his/her comfort zone, and students are expected to give their best effort for all four weeks.

38. Is an interview required as part of the application process?

Students may be interviewed by a member of the Executive Admissions Committee before acceptance into the program.

39. Will I be required to bring any apparatus or books with me?

A laptop is considered a vital learning tool for SPISE, and it is expected that each participant will bring one. If there are any specialty electronics or robotics parts you would like to bring with you, feel free to do so. We provide stationery for you, but you may bring any additional items you think will be useful, including text books.

40. How do I contact the SPISE office?

Direct mail: Caribbean Science Foundation

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