

Qatar University

National Science Promotion Program (NSPP) - 2022

Guidelines

Table of Contents

| SPP's Snapshot | . 3 |
|------------------------|-----|
| rogram Overview | 4 |
| rogram Objectives | |
| esearch Team Structure | |
| ligibility Criteria | . 5 |
| udget | 6 |
| roposals Evaluation | 6 |
| cknowledgement | . 7 |
| nquiries | . 7 |

1. Program Overview

Qatar's national vision is to achieve a sustainable, diversified economy and address its national challenges by advancing knowledge and education. To meet the country's needs, Qatar University offers high-quality undergraduate and graduate programs and contributes to national capacity building by producing competent graduates to destined Qatar's future. The university community has diverse and committed faculty who teach and conduct research, which addresses local, regional, and international challenges, advances knowledge, and contributes actively to society's needs and aspirations. Therefore, as part of its vision, QU endeavors to support Qatar's social and economic development and put its efforts to make the university an institution of choice for the national youth to gain higher education. Based on the aforementioned, Qatar University Young Scientists Center (YSC) is launching a research-funding program named as "National Science Promotion Program (NSPP)."

The YSC provides opportunities to the national youth, both male and female, to participate in diverse STEM programs offered by the center dedicated to transforming them into resilient, intentional, and intellectual citizens. The center aims to facilitate the transition of high school students to the university through various platforms, which help them excel in learning and scientific research. Such initiative aligns with Qatar National Vision 2030 and QU's strategy in promoting youth empowerment through research and innovation programs.

2. Program Objectives

The aim of the "National Science Promotion Program" (NSPP) is to promote research culture and increase the research capacity by endorsing tools such as "Learning by Doing" and "Hands-On experience." By using such tools in the high school education system, students will be more encouraged to do research and benefit Qatar. Through this process, students will get an opportunity to experience research under faculty mentors' supervision from the university. Simultaneously, the NSPP grant will provide training to prepare the students to join the university.

Training the students about research methodology by expert researchers at the university research laboratories will be another objective of this program. Therefore, this program will help high school students become potential candidates for being enrolled in university programs. At the same time, the existing university undergraduate students will get an opportunity to redefine themselves, practice, and a positive step towards being an independent researcher. Research mentors will also contribute to the students' personal development. Also, NSPP will equip the students with the skills to present a high-quality research project at international research competitions such as Intel ISEF and ITEX.

3. Research areas

All the submitted research projects must align with the QU following research pillars:

- Energy and Environment
- Health and Biomedical Sciences
- Information and Communication Technologies

4. Eligibility

Eligible applicants should be affiliated with Qatar University and must hold a Ph.D. degree. Applicants are allowed to submit only one application per cycle, and each project should have one mentor only.

4.1. Eligibility of High School Students

- 1. All full-time Qatari high school students are eligible to participate in NSPP.
- 2. Students must reside in Qatar throughout the project.
- **3.** Students must be in grades 10 or 11 at the time of application.
- **4.** Two students per project are allowed.

4.2. Eligibility of Undergraduate Students

Students must be from science, engineering, or health disciplines enrolled in QU.

5. Role of the QUYSC Research Assistant:

QUYSC representative will provide extensive support arranging and supporting the high school students. Both Administrative and Scientific assistance to the high schools students will be provided by QUYSC research assistant. The representative will also help in competition preparation, such as, registering, preparing documents, taking permission, making videos or poster for competitions. Therefore, QUYSC representative should be given authorship in the journal paper, conference paper and competitions.

6. Program Application Process:

NSPP application process comprises of four stages, namely:

5.1 Phase One:

QU will announce the call and invite mentors to submit research proposals. The proposals should have a clear novelty statement and use the template and comply with QU research priorities and national challenges.

5.2 Phase Two:

All received proposals will be screened, evaluated, shortlisted and will send for reviewing to reviewers within the university. Each proposals will be reviewed based on the below-defined criteria by two reviewers.. The screening will ensure that proposals, applicants, and institutions comply with the program's requirements. The evaluation of submissions shall be based on the following criteria:

- The relevance of the topic to Qatar needs
- The appropriateness of the research plan
- The impact of the project
- The training plan
- Provide a proper research ecosystem to the students

5.3 Phase Three:

The selection of schools will be on a first-come, first-serve basis. The school will nominate two participating Qatari students per project. The participating students will select the project in the Inaugural Day event, after listening about the project from the professors and based on their field interest n.

5.4 Phase Four:

Mentor will select the students and will start their work on selected days and time decided based on the ministry calendar and permission from school.

6. Budget

The grant duration is six months, with the following budget breakdown:

- Equipment and materials, Publication cost up to 8500 QAR. The equipment cost will be specifically for the materials, consumables and miscellaneous costs meant for the proposed research work
- Honorarium for the undergraduate student up to 2000 QAR (by default).
- Based on project evaluation, project mentors will be rewarded as follows:

• 1st Prize: 7000 QAR

2nd Prize: 6000 QAR

• 3rd Prize: 5000 QAR

- Participation reward 3000 QAR (for each remaining project).
- Besides, a travel budget to present the project results in any well-reputed international conference could be provided to one undergraduate student, limited to 10,000 QAR maximum.
- The final report and a conference paper are expected to be submitted by each awarded project.

7. Reporting

The following deliverables should be submitted upon completion of the project:

- 1- **Final Report**: After completion of the project, a final report should be submitted. The final report must follow a given template.
- 2- **Participation in student presentations:** There will be a competition on a research presentation by the high school students in front of the judges. Judges will decide the winners of the research presentation.
- 3- **Publication**: At least one conference paper is expected from each project. A journal manuscript, including the participating student's name, would be highly encouraged and contribute significantly to having the mentor win one of the prizes.

8. Acknowledgment of Support

NSPP mentors shall ensure that all research publications resulting from this grant include the following statement:

"This [publication, poster, report, etc.] was supported by Qatar University NSPP-XXX-XX-XX [GRANT CODE]. The findings achieved herein are solely the responsibility of the authors."

9. Inquiries

For any inquiry regarding this document and the proposal submission process, please send an email to NSP-Program@qu.edu.qa

.