



Framework Document

NRF Freestanding, Innovation and Scarce Skills Development Fund Masters and Doctoral Scholarships

Directorate: Human and Infrastructure Capacity Development

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1. Background and Rationale

Purpose of this framework document

The NRF awards scholarships and bursaries through three modalities *viz.* (i) competitive scholarships awarded as free-standing scholarships following an NRF merit review process; (ii) block grants to universities that nominate students for the bursaries following an institutional selection process; and (iii) grantholder-linked bursaries in which the grant-holder nominates students linked to his/her research project. The purpose of this framework document is to outline the funding principles and implementation of the NRF Freestanding, Innovation Bursary Scheme (which includes DST priority research areas), Scarce Skills Development Fund (SSDF) as well as Scholarships for students with disability.

These funding instruments are funded by the NRF core grant allocation from National Treasury, the Department of Science and Technology (DST) and the Department of Higher Education and Training (DHET) for Human Capital Development (HCD). Funds from the DST are made available through a contractual agreement (DST/CON 0118/2012) with the National Research Foundation (NRF), while funds from the DHET are allocated based on an annual budget proposal submitted by the NRF to the National Skills Fund (NSF).

Background

The NRF is mandated by an Act of Parliament, the National Research Foundation Act (Act No. 23 of 1998) to: *“Support and promote research through funding, human capacity development and the provision of the necessary research facilities, in order to facilitate the creation of knowledge, innovation and development in all fields of science and technology, including indigenous knowledge”*.

In support of this mandate, the NRF makes funds available to support NRF Freestanding, SSDF and Innovation (including DST priority research areas) Masters and Doctoral (including Doctoral abroad) candidates for the 2017 academic year. Masters and Doctoral scholarships are awarded through a competitive process following a merit review process. However, NRF Freestanding Masters bursaries are released as block grants to South African public universities (**Table 1**). In addition, the block grants awards are made to universities to nominate qualifying students in line with the ministerial

guidelines on equity and redress (Ministerial Guidelines on Bursaries and Fellowships, 2013). Applicants for Masters and Doctoral (including Doctoral studies abroad) scholarships must be made by students on the NRF Online Submission system. These funding instruments make funds available to support students pursuing full-time Masters or Doctoral studies at South African public universities and other public research institutions including the science councils and national research facilities.

In addition, the NRF makes funds available to support a small number of scholarships for full-time doctoral studies abroad, with the objective of increasing the number and quality of Doctoral graduates in South Africa. **Applicants to this funding instrument will need to ensure that supplementary funding can be secured as the NRF scholarship may not cover the full cost of tuition and living expenses abroad. Furthermore, the number of Doctoral abroad scholarships to be awarded will be limited due to budget constraints.**

Table 1: Scholarships for Postgraduate studies funded by Departments of Higher Education and Training and Science and Technology for high-end skills in South Africa.

Scholarships	MSc	PhD
NRF Freestanding	Institutional nomination	NRF Merit Review
Scarce Skills	NRF Merit Review	NRF Merit Review
Students with disability	NRF Merit Review	NRF Merit Review
Innovation Bursary Scheme	NRF Merit Review	NRF Merit Review
DST Priority Research Areas	NRF Merit Review	NRF Merit Review
NRF-Sasol-Inzalo	NRF Merit Review	NRF Merit Review
Doctoral Abroad	N/A	NRF Merit Review

The DHET supports the training of postgraduate students through the SSDF scholarships while the DST supports training of postgraduate students through the Innovation bursary Scheme which includes priority research areas. Funding for the SSDF scholarships is made available from NSF residing within the DHET, and managed by the NRF. In addition, the DST and the DHET provides support for students with disabilities at all levels of study.

The **definition of a person with disabilities** is defined according to The Code of Good Practice on Employment of People with Disabilities and the Employment Equity Act, (Act No 55 of 1998). The act states that: only people who satisfy all the criteria in the definition: (i) long-term or recurring; (ii) having a physical or mental impairment; (iii) which substantially limits, are considered as persons with disabilities.

These bursaries and scholarships advances the objectives of the National Development Plan 2030 to increase the number of academic staff members at South African universities with doctoral qualifications to 75% and, the number of PhD graduations to 6000 per annum by the year 2030. Furthermore, these funding instruments advance the joint deliverables of the DST and the DHET for developing high-end skills in South Africa. These high-end skills are critical for South Africa to establish a knowledge-based economy and for producing new knowledge for socio-economic development.

2. Objectives

- Support the development of a critical mass of globally competitive human resources in prioritised areas;
- Promote and advancing science, research and innovation;
- Contribute towards the increase in the number and quality of South African postgraduate students in all areas of (i) Science, (ii) Engineering and (iii) Technology and in the (iv) Social Sciences and (v) Humanities, at the , Masters and Doctoral levels in South Africa;
- Build a pipeline of the next generation of skilled scientists and researchers in South Africa;
- Effect transformation in the percentage representation of postgraduate students from designated groups viz. black, female and persons with disabilities ; and

- Support the development of postgraduate training to meet the specific needs of the country in conjunction with the higher education sector and industry.

3. Areas of Support

3.1 NRF Freestanding

The scholarship is intended to support postgraduate candidates to pursue research studies in all areas of (i) Science, (ii) Engineering and (iii) Technology and in the (iv) Social Sciences and (v) Humanities, at public universities and research institutions in South Africa. The percentage of supported students will be 80% from the Science, Engineering and Technology disciplines and 20 % from the Social Sciences and Humanities.

3.2 Innovation (including DST Priority research areas)

The Innovation Bursary Scheme which also includes priority research areas*, supports students who wish to pursue their postgraduate studies in the fields listed below *viz.*:

- Astronomy;
- Bioinformatics*;
- Biotechnology;
- Cellular and Molecular Biology;
- Chemistry;
- Climate Change*;
- Computer science;
- Drug Discovery and Development*;
- Earth Sciences;
- Earth Observation*;
- Ecology;
- Education;
- Engineering;
- Environmental Sciences;
- Functional Genomics*;
- Global Change, Society and Sustainability*;
- Health Sciences;
- Information Science

- Indigenous Knowledge Systems*;
- Law;
- Mathematical Sciences;
- Marine Sciences*;
- Medicinal Plant Research*;
- Medical sciences;
- Nanotechnology*;
- Nuclear Technologies in Medicine and Biosciences*;
- Palaeosciences*;
- Physics;
- Renewable Energy*;
- Social Science and Humanities; and
- Space Science*.

The percentage of supported students will be 80% from the Science, Engineering and Technology disciplines and 20 % from the Social Sciences and Humanities.

3.3 Scarce Skills Development Fund

The SSDF supports students who wish to pursue their postgraduate studies in the fields listed below *viz.*:

Biological sciences:

Biotechnology;

• *Engineering:*

All fields of engineering;

• *Financial sector:*

Accounting, Actuarial Science, Auditing, Economic Sciences, Statistics;

• *Management:*

Financial Management;

• *Physical sciences:*

Computer Sciences, Chemistry, Geology, Information Systems, Mathematical Sciences, Physical Sciences; and

• *Sector specific:*

Agricultural Sciences, Demography, Transportation Studies, Tourism.

3.4 Students with Disability

The scholarship is intended to support postgraduate candidates, with a physical or mental impairment, to pursue research degrees in all areas of (i) Science, (ii) Engineering and (iii) Technology and in the (iv) Social Sciences and (v) Humanities, at public universities and research institutions in South Africa.

3.5 Doctoral Aboard

The scholarship is intended to support doctoral candidates to pursue research studies in all areas of (i) Science, (ii) Engineering and (iii) Technology and in the (iv) Social Sciences and (v) Humanities, at a university abroad. **Preference will be given to applications to obtain a Doctoral degree in a vulnerable discipline, emerging research area or where there exists a paucity of research infrastructure and/or suitably qualified supervisors in South Africa.**

4. Eligibility

The eligibility criteria listed below applies to applicants for Masters and Doctoral scholarships:

- Scholarships are open to South African citizens, South African permanent residents as well as a limited percentage of non-South African citizens registered at a South African public university.
- All applicants for full-time Masters or Doctoral studies in South Africa must be registered or, intending to register at a South African public university.
- Applicants that already hold a degree at the level for which they are applying for funding are not eligible.
- **Applicants with an in progress or a three year undergraduate degree are not eligible to apply.**
- **Scarce Skills Development Fund Scholarships are open to South African citizens and South African permanent residents only registered at a South African public university.**

The eligibility criteria listed below applies to all applicants' for Doctoral abroad scholarship:

- Scholarships are open to South African citizens including permanent residents only;
- All applicants for full-time doctoral studies abroad must be registered or intending to register at a university abroad; and
- Applications will only be considered if the application includes a provisional letter of acceptance for doctoral studies from the university abroad.

5. Application Process

Applications for funding in 2017 must be submitted through the NRF Online Submission System by accessing the link: <https://nrfs submission.nrf.ac.za/>. The call for applications will be open from June 2016 to July 2016. Further instructions on the application process will be made available in the **NRF Freestanding, Innovation and Scarce Skills Development Fund Masters and Doctoral Application and Funding Guide for 2017**.

6. Selection criteria

The following will be considered in evaluating all applications i.e. Masters, Doctoral and Doctoral abroad (**Table 2 and 3**) in a competitive merit review process:

- Academic merit;
- Applicant's track record;
- The feasibility and scientific merit of the applicant's research project proposal;
- Potential impact;
- Alignment with National Research Priorities;
- Identification of a suitable supervisor and co-supervisor, where applicable; and

Support from the identified supervisor and referees.

For Doctoral abroad studies, the following additional information will be required:

- Motivation explaining the benefits of undertaking the doctoral studies abroad and reasons why the doctoral studies cannot be undertaken in South Africa;
- Identification of a suitable doctoral supervisor. Where this is not yet available, successful applicants will be required to submit this information at a later date; and
- Support from a minimum of two referees.

Table 2: Scorecard for the assessment of proposals for Masters Scholarships.

Criteria	Description	Weight
Academic Merit	Average percentage mark for previous degree.	15%
Scientific merit of the proposal	Literature review Aims, objectives and methodology	45%
Feasibility	Work plan, project organisation, project scheduling and timelines.	35%
Alignment with National Research Priorities	Alignment with one or more national research strategies and the potential for socio and/or economic impact	10%
		100%

Table 3: Scorecard for the assessment of proposals for Doctoral and Doctoral abroad Scholarships.

Criteria	Description	Weight
Academic Merit	Average percentage mark for previous degree.	15%
Applicant's track Record	Past Research Outputs (e.g. Journal articles, conference presentations /proceedings, Book Chapters, Patents).	5%
Scientific merit of the proposal	Novelty and Scientific contribution to new knowledge; multidisciplinary aspects; alignment of the research question with the methodology.	45%
Feasibility	Work plan, project organisation, project scheduling and timelines.	30%
Potential Impact of the Research	Potential to contribute national research strategies and the strategic goals of the knowledge economy.	5%
		100%

The NRF review process from submission of the application to when outcomes and award letters are sent to successful applicants is highlighted in **figure 1**. It is the responsibility of an applicant to ensure that their application has been submitted to the NRF.

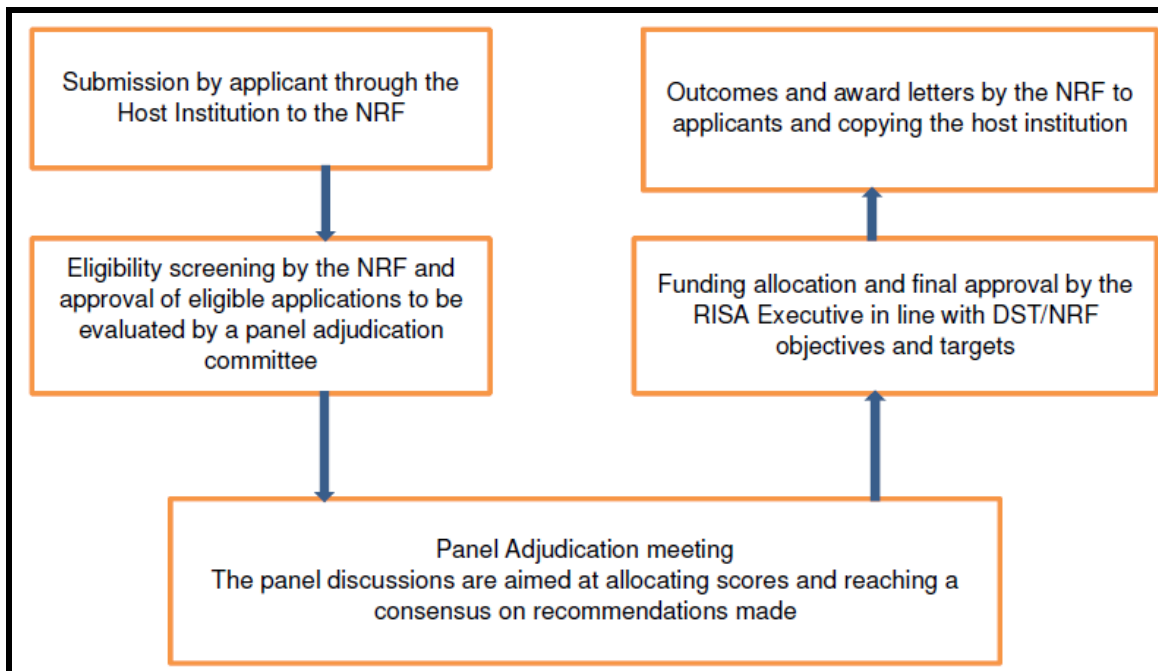


Figure 1: NRF review process (Reproduced from Innovation Masters and Doctoral Scholarships call document for 2016).

7. Equity and Redress

In line with the national imperative of equity and redress, the bursary scheme prioritises support for appropriately qualified applicants from designated groups *viz.* black, female and persons with disabilities, while ensuring that only applications that meet the NRF merit review and selection criteria are supported. The set equity targets are 80% blacks, 55% women and 4% students with disabilities as directed by the DST Ministerial Guidelines on Equity and Redress (Ministerial Guidelines on Bursaries and Fellowships, 2013).

With respect to citizenship of successful applicants, the awards will be allocated in line with the following percentages:

- 87% to South African (including permanent residents);

- 5% to students from the South African Development Community (SADC) region
- 4% to students from the rest of Africa; and
- 4% to students from non-African countries

The DHET funded bursaries and scholarships i.e. Scarce Skills Development Fund will be distributed according to the following set equity targets; 85% blacks, 55% women and 4% students with disabilities.

8. Conditions of Award

- Successful applicants who are offered the scholarships by the NRF are required to complete and sign the student agreement that will be forwarded at the time of the award.
- The scholarship-holder may undertake a maximum of 12 hours of teaching, tutorials, assistance or demonstration duties per week on average during the year of study and may be remunerated for these duties, provided that they are reimbursed at a rate not exceeding the normal institution tariff for services rendered.
- Scholarship-holders may not hold full-time salaried employment during the tenure of the award.
- All NRF scholarships awards shall be held as primary funding towards the research study.
- Scholarship-holders are allowed to hold non-binding supplementary grants or emoluments to half the value of the NRF award. Alternatively, should the host university have an institutional capped value, the NRF award can be supplemented to the university capped value for the level of study.
- NRF scholarships may not be held simultaneously with a bursary / scholarship from any other government or NRF administered source.
- If a scholarship-holder wishes to change the research project or field of study, supervisor or institution for which the scholarship was awarded, a letter of request from the student, initial supervisor and new supervisor must be submitted to the NRF through the appropriate institutional authority for consideration prior to such a change.

- The scholarship-holder must obtain the degree for which the scholarship was awarded by the contractual date which is within one (1) year after NRF funding has ceased and notify the NRF via the university authority. Should the scholarship-holder not complete the degree for which the scholarship was awarded, the funds will have to be returned to the NRF plus interest at the prevailing prime rate charged by the NRF bankers.

In addition, for Doctoral aboard scholarships the following condition of awards must be noted:

- Successful students who are offered the NRF free-standing scholarship will be required to give a written undertaking to return to South Africa upon completion of the doctoral studies abroad.
- Scholarship-holders who intend to continue with postdoctoral research training abroad before returning to South Africa will also need to seek written approval from the NRF.
- The award will be paid directly into the student's account upon submission to the NRF of the required written confirmations, which includes stamped bank statements or banking details.
- The applicant will be responsible for securing additional funding to cover any shortfall in funding required to undertake his/her Doctoral studies abroad.

9. Value of support

Scholarship values for full-time postgraduate students are indicated in **tables 4 and 5**. Masters (NRF Freestanding only) awards will be administered as a block grant to universities at which the students will be registered for a postgraduate degree (**Table 1 and 5**). The period of support is calculated for the first year of registration for the study or research regardless of NRF funding.

9.1. Innovation, SSDF and students with disability

Table 4: Bursary and Scholarship values, Innovation, SSDF and students with disability, for full-time postgraduate students for 2017 academic year.

Level of study	Scholarship value (per annum)	Maximum Funding period
Masters	R90 000	2 years
Doctoral	R120 000	3 years

Assistive devices for students with disabilities

Scholarship-holders with a disability may apply for additional funding for an assistive technology device of up to R20 000. This is the maximum amount allowed during the tenure of the scholarship. As defined by the Individuals with Disabilities Education Act Amendments of 1997 (IDEA), an assistive technology device is "*any piece of equipment, or product system, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities*".

Travel grants for Masters Students

In addition, Masters scholarship-holders may apply for a travel grant of up to R15 000 which can be used to attend local conferences, workshops, and a visit to a laboratory or any other activity that supports the beneficiaries' current research progression. This is the maximum amount allowed during the tenure of the scholarship for Innovation, SSDF and students with disabilities.

Travel grants for Doctoral students

Doctoral scholarship-holders may apply for a travel grant of up to R15 000, for local travel, and up to R50 000, for international travel. These funds may be used to attend conferences, workshops, visits to a laboratory or, any other activity that supports the beneficiaries' current research progression. These are the maximum amounts allowed during the tenure of the scholarship for Innovation, SSDF and students with disability.

Scholarship-holders who wish to access the travel grant and/or assistive technology device must complete a travel grant and/or assistive technology device application form accessible from the NRF system for consideration and approval/disapproval by the NRF.

9.2. NRF Freestanding

Table 5: Comprehensive Bursary and Scholarships values, NRF Freestanding, for fulltime postgraduate students for 2017 academic year.

Level of study	Scholarship value (per annum)	Maximum Funding period
Masters	R50 000	2 years
Doctoral	R70 000	3 years

Assistive devices for students with disabilities

Student with disability scholarship-holders may apply for additional funding for an assistive technology device of up to R20 000. This is the maximum amount allowed during the tenure of the scholarship. As defined by the Individuals with Disabilities Education Act Amendments of 1997 (IDEA), an assistive technology device is "any piece of equipment, or product system, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities".

Travel grants for Masters and Doctoral Students

In addition, Masters and Doctoral scholarship-holders may apply for a travel grant of up to R10 000 which can be used to attend local conferences, workshops, and a visit to a laboratory or any other activity that supports the beneficiaries' current research progression. This is the maximum amount allowed during the tenure of the scholarship for NRF Freestanding.

Scholarship-holders who wish to access the travel grant and/or assistive technology device must complete a travel grant and/or assistive technology device application form accessible from the NRF system for consideration and approval/disapproval by the NRF.

9.3. Doctoral Abroad

The value of the scholarship will be calculated as the equivalent of the United States Dollar (USD) of 22 000 per annum, for a maximum of four (4) years (**Table 6**), and will be paid out in the currency of the country in which the Doctoral studies will be undertaken. In addition, the NRF will cover the cost of:

- A single cheapest economy airfare for travel to the country in which the Doctoral studies will be undertaken; and
- A single cheapest economy airfare to return to South Africa upon completion of the Doctoral studies abroad.

Table 6: NRF Doctoral abroad Scholarship, for fulltime postgraduate students for 2017 academic year.

Level of study	Scholarship value (per annum)	Maximum Funding period
Doctoral	22 000 USD	4 years

The NRF will not cover any costs for accompanying family members or any other related costs associated with the Doctoral studies. The applicant will be responsible for securing additional funding to cover any shortfall in funding required to undertake his/her doctoral studies abroad.

10. Funding principle

The NRF Freestanding, Innovation and Scarce Skills Development Fund for Masters and Doctoral scholarships are aimed at increasing the throughput rates of Masters and Doctoral students at public higher education institutions. Consideration will be given to ensuring the need to strengthen research capacity in scarce skills, priority skills and knowledge fields as well as to accelerate the demographic transformation of the next generation of researchers. Allocation of funding will be governed by the annual budget availability.

11. Reporting

For continuous monitoring of the funding instrument, the scholars will be required to submit Annual Progress Reports (APR) in a format provided by the NRF, against deliverables as outlined in the application form and the signed NRF Scholarship Agreement. The NRF may in consultation with the grant holder's research office, request interim progress report for the purpose of implementing corrective measures timeously to ensure that stated objectives are met within the stipulated timeframes.

Scholarships for qualifying continuing scholars will be released upon submission of an APR in accordance with the NRF Scholarship Agreement. The NRF standard practice is to support all eligible continuation students aligned to the NRF maximum period of support for level of study in order to enable them to complete their postgraduate degree.

For Competitive Scholarships and bursaries administered as Block grants to institutions, funding for qualifying continuing students will be released upon submission of an APR supported by the supervisor in accordance with the NRF Scholarship Agreement (**Table 7**). Continuing students supported through Block grants to institutions do not require re-nomination.

Table 7: Process for Block grants administration at Universities.

	MSc	PhD
New Students	Annual nominations	Annual nominations
Continuing students	Submission of APR	Submission of APR

12. Financial control

These awards will be managed in terms of standard NRF financial policies and procedures. The payment of the grant by the NRF to successful applicants will be administered by the Grants Management and Systems Administration (GMSA) Directorate to the relevant institutions' cost centres. The institution will in turn administer

the funds on behalf of the successful applicant to the value of the full sum awarded by the NRF.

Scholarships not taken up by June of the year of award will be cancelled for reallocation unless otherwise approved by the NRF.

13. NRF Contact persons

For programme related enquiries, please contact:

Ms Fulufhelo Malamatsho: Professional Officer –Human and Infrastructure Capacity Development (HICD). Telephone: 012 481 4166. Email: fulufhelo.malamatsho@nrf.ac.za

Mr Mduduzi Tshabangu: Professional Officer – HICD. Telephone: 012 481 4148. Email: mduduzi.tshabangu@nrf.ac.za

For Grant Management and System Administration related enquiries, please contact:

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