



# NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH BHUBANESWAR

**Advt.No: NISER / ACAD / PhD / 2026-27 (1)**

Date: 01 April 2026

## Notice for Admission to PhD Program: 2026-27 (Summer Session)

Online applications are invited from Indian citizens for admission to Ph.D. program scheduled to commence from August 2026 in the following schools of NISER, Bhubaneswar.

1. School of Biological Sciences (SBS)
2. School of Chemical Sciences (SCS)
3. School of Computer Sciences (SCoS)
4. School of Earth & Planetary Sciences (SEPS)
5. School of Humanities and Social Sciences (SHSS)
6. School of Mathematical Sciences (SMS)
7. School of Physical Sciences (SPS)

### 1. Eligibility

| School                                | Minimum Educational Qualifications #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Biological Sciences</b>            | 55% or equivalent GPA* in Masters or M. Tech or M. Pharm in any branches of Agricultural Sciences, Biology, Life Sciences, Pharmacy (any specialization), Veterinary Sciences, Computer Sciences, Bioinformatics and Biotechnology. Students with Master's degree in Physics, Chemistry or Mathematics having interest in pursuing a career in Biology are also encouraged to apply. Candidates with a 4 year / 8 semester Bachelor's degree program with a minimum of 75% marks in aggregate or equivalent grade are also eligible to apply for the program.                                                                                            |
| <b>Chemical Sciences</b>              | 55% or equivalent GPA in Master's in Chemistry or allied Chemistry fields. Students with Master's degree in any branches of Basic Sciences with undergraduate degree in Chemistry (or Chemistry as one of the subjects) or M.Tech in applied Chemistry or Computer Sciences with interest in pursuing a career in Chemistry are also encouraged to apply. Candidates with a 4-year / 8-semester Bachelor's degree program with chemistry as major subject with a minimum of 75% marks in aggregate or equivalent grade or in a 4 year B.E/B.Tech degree programs in chemical engineering or related branches are also eligible to apply for the program. |
| <b>Computer Sciences</b>              | 55% or equivalent GPA in a Masters program. Candidates with a 4 year / 8 semester Bachelor's degree program with a minimum of 75% marks in aggregate or equivalent grade are also eligible to apply for the program.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Earth &amp; Planetary Sciences</b> | 55% or equivalent GPA in M.Sc./M.Tech/M.E in Physics/ Astronomy and Astrophysics/Space Science/Geology/ Applied Geology/Geoscience/Geological Sciences/ Geophysics/ Earth Science(s)/Atmospheric and Oceanic Sciences/ Chemistry/ Engineering Physics/ Electrical/ Electronics/Mechanical/Civil/ Computer engineering/Data Science. Candidates with a minimum 75% marks in aggregate or its equivalent grade in a 4 year / 8 semester Bachelor's degree science program with physics/chemistry/geology as one of the subjects or in a 4 year B.E/B.Tech degree program are also eligible to apply for the program.                                       |
| <b>Humanities and Social Sciences</b> | A Master's or an equivalent degree from a University or Institution recognized by UGC with 55% or equivalent GPA in Master's degree examination in Humanities and Social Sciences or Candidates with a minimum 75% marks in aggregate or its equivalent grade in a 4 year / 8 semester Bachelor's degree program with English/ Economics/ Sociology as one of the subjects                                                                                                                                                                                                                                                                               |

|                              |                                                                                                                                                                                                                                                                                                                                               |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mathematical Sciences</b> | A Master or an equivalent degree from a University or Institution recognized by UGC with 55% or equivalent GPA in Master's degree examination, OR 75% marks in aggregate or its equivalent grade in a 4 year / 8 semester Bachelor's degree program.                                                                                          |
| <b>Physical Sciences</b>     | 55% or equivalent GPA in Masters in Physics or M.E / M.Tech in Applied Physics. Candidates with a minimum 75% marks in aggregate or its equivalent grade in a 4 year / 8 semester Bachelor's degree science program with physics as one of the subjects or in a 4 year B.E/B.Tech degree programs are also eligible to apply for the program. |

\* Candidates with GPA in a qualifying degree may need to produce the conversion note (in case it is not mentioned in their mark sheet) from their institution towards the calculation of percentage.

Candidates who are appearing for their final examination for the qualifying Degree can also apply, provided they submit an undertaking that they will submit the qualifying degree certificates by the time of admission into the program.

## 2. Requirement of Qualifying in National Level Examinations for pursuing Ph.D program

**School of Biological Sciences** - Candidates should have qualified at least one of the National Level Examinations i.e. CSIR-UGC-NET/GATE/GPAT/DBT-BET/ICMR/JGEEBILS-2026, valid for the academic year 2026-2027.

**School of Chemical Sciences** - Candidates should have qualified at least one of these National Level Examinations: CSIR-UGC NET/GATE valid for the academic year 2026-2027.

**School of Computer Sciences** - Candidates should have qualified at least one of these National Level Examinations i.e. CSIR-UGC-NET (LS or JRF)/GATE in MATHS/CS/IT/EE/STATS or NBHM/JEST/ TIFR-GS (Maths or CS or LIDS) valid for the academic year 2026-2027..

**School of Earth and Planetary Sciences** – Candidates should have qualified at least one of these National Level Examinations i.e. CSIR-UGC-NET/GATE/JEST valid for the academic year 2026-2027.

**Humanities and Social Sciences** – Candidates should have qualified at least one of National Level Examinations as described below.

**Economics:** JRF or NET in Economics from UGC/CSIR/ICSSR/GATE or any such credible funding agency

**English:** JRF or NET in English from UGC/CSIR/ICSSR/GATE or any such credible funding agency

**Sociology:** JRF or NET in Sociology/ Economics/ Geography from UGC/CSIR/ICSSR/GATE or any such credible funding agency

**School of Mathematical Sciences** - Candidates should have qualified at least one of these National Level Examinations in Mathematical Sciences i.e. CSIR-UGC-NET (JRF only) / GATE / NBHM\* or any other equivalent national level examination valid for the academic year 2026-2027.

\*A student will be considered to be qualified in the National Level Written Examination conducted by NBHM if he/she has received a call letter from NBHM to appear in the interview for PhD fellowship 2026 (irrespective of getting selected for NBHM PhD fellowship 2026 or not).

**School of Physical Sciences** – Candidates should have qualified at least one of these National Level Examinations i.e. CSIR-UGC-NET/GATE/JEST, valid for the academic year 2026-2027.

### **Important Note:**

a) The cut-off marks for national examinations such as GATE/JEST/ JGEEBILS/CSIR-UGC-NET etc. will be further decided by each School for the relevant subject area.

- b) *Students having INSPIRE Doctoral Fellowship ONLY, without qualifying any of the above-mentioned national level written examinations, will NOT be considered for admission to PhD program in NISER.*
- c) *Candidates with GPA/CGPA in qualifying degree will be required to produce supporting documents from their respective University/Institute specifying the conversion into percentage if it is not mentioned in their mark sheet.*

### 3. Fellowship

- i. ₹37,000/- as Junior Research Fellowship for the first two years, and subsequently ₹42,000/- for a maximum period up to another three years as Senior Research Fellowship, subject to fulfilment of all the academic requirements stipulated by the Institute from time to time.
- ii. Students with external fellowship from agencies viz. CSIR, UGC, etc. will be eligible to draw fellowship as per the extant rules of the respective funding agencies. Such students will NOT be considered for NISER/DAE fellowship.

### 4. Research areas currently pursued in different schools are as follows:

#### School of Biological Sciences

- Evolutionary systematics and phylogenetics of tropical biodiversity  
(<https://biogeosys.in/research-focus/>)
- Historical biogeography and diversification across tropical Asia
- Trait evolution and macroevolutionary patterns using phylogenetic and genomic approaches.
- Organelle Biogenesis, Cellular trafficking and Membrane remodelling  
(<https://www.niser.ac.in/profile/arahaman>).
- Intercellular communication in gastric cancer aggressiveness.  
(<https://www.niser.ac.in/profile/asima>)
- Hypoxia-induced cytoskeletal changes in gastric cancer cells.  
(<https://www.niser.ac.in/profile/asima>)
- Importance of Calcium ion channels in immune modulation (T cells and macrophages)
- Importance of TRP ion channels in heavy metal homeostasis within neuronal cells
- Molecular genetics and epigenetics of aging disorders: Neurodegeneration and Cancer  
(<https://www.niser.ac.in/profile/debasmita>)
- Cross talk between Auxin and light in lower plants
- Light signalling and flowering time control in higher plants
- Understanding molecular mechanism of eukaryotic non-canonical start codon selection
- Conformation dynamics of protein complexes from human viral pathogens involved in cell entry and replication
- Identification and characterization of phage-encoded inhibitors of bacterial immune systems

For detailed information on research areas pursued in the school, please visit:

<https://www.niser.ac.in/people/fac/sbs>

#### School of Chemical Sciences :

For detailed information on research areas, please visit <https://www.niser.ac.in/people/fac/scs>

#### School of Computer Sciences :

Broadly in the following areas:

- |                            |                                 |
|----------------------------|---------------------------------|
| • Parameterized Algorithms | • Secure Multiparty Computation |
| • Randomized Algorithms    | • Computational Geometry        |
| • Sublinear Algorithms     | • Complexity Theory             |
| • Machine Learning         |                                 |

For detailed information on research areas, please visit the webpage

<https://www.niser.ac.in/people/fac/scos>

### School of Earth and Planetary Sciences:

- Cosmochemistry and experimental planetary science. Focused on diffusion processes in metals within iron meteorites using modelling and experiments (programming and mathematical approach).
- Hyperspectral image processing and analysis, Reflectance spectroscopy and photometry using radiative transfer model, comparative planetary analogue / Komatiite / Anorthosites/ Basalt geochemistry
- Atmospheric physics, field meteorological observations, regional convective processes, pre-monsoonal heat stress phenomenology
- Exoplanet Atmospheres & Interiors, Planet formation, Observational Astrophysics: JWST and ALMA observations
- Earthquake seismology and physics of earthquakes, laboratory friction experiments and inverse problems
- Characterization of Exoplanet Atmospheres using modelling and Observations. Interpreting HST and JWST Observations.
- Thermodynamic and kinetic studies of petrological (metamorphic-magmatic) processes; Tectonic and continental crust evolution on early Earth
- Crust-mantle dynamics in the early Earth, mafic rock weathering and the global carbon cycle, metal stable isotopes in the critical zone

For detailed information about the school and the research areas pursued, please visit the webpage: <https://www.niser.ac.in/people/fac/seps>

### Humanities and Social Sciences :

- **Economics:** Energy Economics, Environmental Economics, Public Economics
- **English:** Afrofuturism, Speculative Fiction
- **Sociology:** Public Policy and Governance (Education/Health/Livelihood), Human-wildlife conflict, Society-Science Interface, Environment and Climate Change

For detailed information on research areas, please visit the webpage: <https://www.niser.ac.in/shss/faculty>

### School of Mathematical Sciences :

Algebra, Algebraic Geometry, Algebraic Graph Theory, Cryptography, Differential Equations, Differential Geometry, Discrete Mathematics, Functional Analysis, Harmonic Analysis, Incidence Geometry, Number Theory, Probability Theory, Representation Theory.

For more information, please visit the webpage: <https://www.niser.ac.in/sms/faculty>

### School of Physical Sciences :

For detailed information on research areas, please visit the webpage: <https://www.niser.ac.in/people/fac/sps>

## 5. Selection Procedure

- The selection committee of the respective schools will shortlist the candidates from the applications received by the deadline. Merely satisfying the minimum qualifications does not guarantee shortlisting. The schools may set additional criteria as deemed necessary.
- The short-listed candidates will be called for an interview, supplemented by a written test, if necessary, for the admission.
- Based on the academic record and the performance of the candidates in the selection process, the selection committee will recommend candidates for admission to the Ph.D. program.
- All eligible candidates called for the Test / Interview will be reimbursed return travel fare equivalent to second-sleeper class railway fare by the shortest route from their place of residence to the Institute upon production of valid documents.

## 6. How to Apply

- The applicant must apply online through NISER website ([Online Portal](#)) following the stepwise instructions mentioned therein to complete the application submission process. Successful submission of the online application is entirely the candidate's responsibility. NISER will not bear any liability of an incomplete application or non-submission of any required supporting document.
- **Candidates intending to apply for more than one school must fill up separate online application forms for each school with appropriate supporting documents.**
- NISER does not demand any application fee from the candidates for the PhD program.

## 7. Important dates

- Online application portal will be activated on : **1<sup>st</sup> April 2026** (*all schools*)
- Last date for filling up online application : **30<sup>th</sup> April 2026** (*all schools*)  
**10<sup>th</sup> May 2026** (*School of Physical Sciences*)  
**20<sup>th</sup> May 2026** (*School of Computer Sciences*)
- Short-listed candidates list will be uploaded on NISER website:  
**6<sup>th</sup> – 8<sup>th</sup> May 2026** (*all schools*)  
**13<sup>th</sup> – 5<sup>th</sup> May 2026** (*School of Physical Sciences*)  
**26<sup>th</sup> – 27<sup>th</sup> May 2026** (*School of Computer Sciences*)
- Tentative dates for test/interview are as follows:
  1. School of Biological Sciences : **25 – 26 May 2026**
  2. School of Chemical Sciences : **24 – 25 June 2026**
  3. School of Computer Sciences : **29 – 30 June 2026**
  4. School of Earth & Planetary Sciences : **11 – 12 June 2026**
  5. School of Humanities and Social Sciences : **28 – 29 May 2026**
  6. School of Mathematical Sciences : **16 – 18 June 2026**
  7. School of Physical Sciences : **8 – 10 June 2026**
- Each school will send the call letters to the candidates separately. Kindly refer to the website for the announcement of the selected candidates.
- The PhD first-semester registration is scheduled to be held **on 31<sup>st</sup> July 2026**, and classes commence on **3<sup>rd</sup> August 2026**.
- If you have any further query, kindly send an email to:
  - School of Biological Sciences : [cpsbs@niser.ac.in](mailto:cpsbs@niser.ac.in)
  - School of Chemical Sciences : [cpscs@niser.ac.in](mailto:cpscs@niser.ac.in)
  - School of Computer Sciences : [cpscps@niser.ac.in](mailto:cpscps@niser.ac.in)
  - School of Earth & Planetary Sciences : [cpseps@niser.ac.in](mailto:cpseps@niser.ac.in)
  - School of Humanities and Social Sciences : [cpshss@niser.ac.in](mailto:cpshss@niser.ac.in)
  - School of Mathematical Sciences : [cpsms@niser.ac.in](mailto:cpsms@niser.ac.in)
  - School of Physical Sciences : [cpsps@niser.ac.in](mailto:cpsps@niser.ac.in)

Applicants are encouraged to visit school web page for more information on research activities.

### Checklist for application submission

During online submission, you will need to have the following ready with you for uploading;

- JPEG file of your passport size photo.
- JPEG file of your valid signatures.
- Birth Certificate/10th pass certificate in support of date of birth.
- Certificate and mark sheets in support of passing qualifying examination i.e Master's degree OR 4 Years / 8 Semester Bachelor's degree, whichever is applicable. In case the original pass certificate is not issued by University then a provisional certificate from the University/college certifying the completion of degree should be submitted.
- Certificate/document in support of qualifying national level examination(s) viz. CSIR-UGC NET JRF/DBT-BET JRF/JEST/NBHM/GATE or any other as applicable.

Dean, Academic Affairs