

जवाहरलाल नेहरू उन्नत वैज्ञानिक अनुसंधान केंद्र (ज.ने.उ.वै.अ.के.)

(विज्ञान एवं प्रौद्योगिकी विभाग,भारत सरकार के अधीन एक स्वायत्त संस्था तथा सम विश्वविद्यालय संस्था)

Jawaharlal Nehru Centre for Advanced Scientific Research

(An Autonomous Institution under Dept. of Science & Technology, Govt. of India and an Institution Deemed to be University)

जक्कुरु परिसर, बेंगलूरु - 560 064, भारत / Jakkur Post, Bengaluru - 560 064, INDIA

RESEARCH ADMISSIONS 2025

Guidelines for Candidates:

Applications are invited from eligible applicants for admissions to the following degree programmes:

- (1) Research Programmes [(Ph.D. / MS(Engg.) / MS(Research)]
- (2) Master of Science (M.Sc.) in Chemistry with the option to specialize in Materials Chemistry/Chemical Biology /Energy (Two-year programme)
- (3) Master of Science (M.Sc.) in Inter-disciplinary Biosciences
- (4) Integrated Ph.D. (Int. Ph.D.) Programmes
- (5) Post Graduate Diploma in Materials Science (PGDMS)

The gist of the admission operations is given in the following paragraphs.

Applicants possessing the educational qualifications including those in the final semester/year of their qualifying examinations but expect to complete all the requirements for award of the degree (like examinations, project dissertations, viva-voce etc.,) by 31.07.2025 and can furnish necessary certificates on or before 31 October 2025 are eligible to apply.

1. RESEARCH PROGRAMMES [Ph.D. / M.S(Engg.) / M.S(Research)]

1.1 Eligibility for Ph.D program

Candidates with an M Sc. or equivalent, B.E/B.Tech/B.S. (4 year) or equivalent or M.E/M.Tech or equivalent or B.VSc./M.VSc. or MBBS/MD as applicable to individual Units as given in the table below are eligible to apply.

- Candidates with an M.Sc. or equivalent, M.E/M.Tech or equivalent should have at least 55% marks in aggregate or its equivalent grade on a point scale wherever the grading system is followed.
- Candidates seeking admission after a 4-year/8-semester Bachelor's degree programme should have a minimum of 75% marks in aggregate or its equivalent grade on a point scale where the grading system is followed.

The candidates should also have qualified in any one of the national exams: GATE/JEST/GPAT/UGC-JRF/CSIR-NET-JRF/ICMR-JRF/DBT-JRF/INSPIRE-JRF. The award certificate of such tests should have the validity period for seeking admission to a research programme as on 1st August 2025.

Qualifying in the national exam is desirable for ME/M. Tech or equivalent degree holders.

| Sl No. | Unit | Eligible Education qualifications | Qualifying in any one of the national entrance tests |
|-----------|---|---|---|
| 1. | Chemistry and Physics of Materials Unit | Master's Degree in Science or equivalent in Electronics, Chemical/Mathematical/Physical/ Materials Science. Bachelor's Degree in Engineering/Technology/4-year Bachelor of Science or equivalent in Electrical/Electronics/Metallurgy/ Polymer/Engineering Physics/Nano Technology/Chemical. | Valid GATE /JEST score / NET-JRF* |
| | | Master's Degree in Engineering/Technology or equivalent in Electrical/Electronics/Metallurgy/Polymer/Engineering Physics/Nano Technology/Chemical | Qualifying in one of the national exams mentioned above is desirable |
| 2. | Engineering Mechanics Unit | Master's Degree in Science or equivalent in Mathematical/ Physical Sciences. Bachelor's Degree in Engineering/Technology/4-year Bachelor of Science or equivalent in Aerospace/ Mechanical /Metallurgy/ Polymer/ Engineering Physics /Chemical. Master's Degree in Engineering/Technology or equivalent in | Valid GATE /JEST score / NET-JRF* Qualifying in one of the |
| 3. | Evolutionary and Organismal Biology Unit | Aerospace/Mechanical/Metallurgy/Polymer/Engineering Physics/Chemical/Atmospheric Science. 1. Master's Degree in Science or equivalent in Life Sciences / any area of Biological Sciences / Mathematics /Physics. 2. Bachelor's Degree in Engineering/Technology/4-year Bachelor of Science or equivalent in Biotechnology, Biological Engineering, or any Biology related area. 3. MBBS /M.D. 4. B.VSc. / M.VSc. | national exams mentioned above is desirable Valid GATE /JEST score / NET-JRF* |
| | | Master's Degree in Engineering/Technology or equivalent in Biotechnology, Biological Engineering, or any Biology related area. | Qualifying in one of the national exams mentioned above is desirable |
| 4. | Molecular Biology and Genetics Unit | Master's Degree in Science or equivalent in Bioinformatics, Biotechnology, Chemical/ Biological/Life Sciences. Bachelor's Degree in Engineering/Technology/4-year Bachelor of Science or equivalent in Biotechnology, Bioinformatics, or any Biology related area. MBBS /M.D. Master's Degree in Engineering/Technology or equivalent in Biotechnology, Bioinformatics, or any Biology related area. | Valid GATE /JEST/ score / NET-JRF* Qualifying in one of the national exams mentioned share is desirable. |
| 5. | New Chemistry Unit | Master's Degree in Chemistry/Physics. Bachelor's Degree in Engineering/Technology/4-year Bachelor of Science (preferred with Chemistry as a major subject) | above is desirable Valid GATE score / NET-JRF* |

| 6. | Neuroscience Unit | Master's Degree in Science or equivalent in Neuroscience, Bioinformatics, Biotechnology, Biological/Life Sciences/Pharmacy. 4-year Bachelor of Science or equivalent in Biotechnology, Bioinformatics, or any Biology related area/Bachelor's Degree in Engineering or Technology (electrical or computer science branches) MBBS /M.D. Master's/4-year Bachelor's Degree in non-Biology area with demonstrated interest in Neuroscience can also apply | Valid GATE /JEST/GPAT score / NET-JRF* |
|----|------------------------------|---|--|
| | | Master's Degree in Engineering/Technology or equivalent in Biotechnology, Bioinformatics, or any Biology related area. | Qualifying in one of the national exams mentioned above is desirable |
| 7. | Theoretical Sciences Unit | Master's Degree in Science or equivalent in Electronics, Chemical/Mathematical/Physical/Materials Sciences. Bachelor's Degree in Engineering/Technology/4-year Bachelor of Science or equivalent in Aerospace/ Engineering Physics/ Electrical/ Electronics /Metallurgy /Chemical/Mechanical Sciences. | Valid GATE /JEST score / NET-JRF* |
| | | 3. Master's Degree in Engineering/Technology or equivalent in Aerospace/EngineeringPhysics/Electrical/Electronics/Metallurgy/Chemical/Mechanical Sciences. | Qualifying in one of the national exams mentioned above is desirable |

Note:

- 1. The GATE/JEST/GPAT/NET JRF/other National entrance test passing certificate/score card should be valid as on 01 August 2025.
- 2. *NET JRF includes –Joint CSIR-UGC NET for JRF; UGC-NET for JRF; DBT JRF; ICMR JRF; INSPIRE. Applicants must be qualified for Junior Research fellowship (JRF) to be eligible to apply through NET JRF mode.
- 3. Applicants applying through INSPIRE mode must be in possession of a valid provisional INSPIRE offer for consideration of their application at level II of the selection, issued by DST at the time of interview.

1.2 Eligibility for M.S. (Engg.) and M.S. (Research) programs

• M.S. (Engg.) is offered by Chemistry and Physics of Materials Unit (CPMU), Engineering Mechanics Unit (EMU), New Chemistry Unit (NCU) and Theoretical Sciences Unit (TSU).

The candidate should possess B.E/B.Tech/B.S. (4 year) in the areas listed in the above table (relevant to the Unit offering) with a valid GATE /JEST score / NET-JRF*.

• M.S. (Research) is offered by Evolutionary and Organismal Biology Unit (EOBU), Molecular Biology Unit (MBGU) and Neuroscience Unit.

The candidate should possess B.E/B.Tech/B.S. (4 year) /B.VSc./M.VSc. or MBBS/MD in the areas listed in the above table (relevant to the Unit offering) with a valid GATE /JEST score / NET-JRF*.

^{*} as indicated in the Note above.

1.3 Selection procedure

Candidates are short-listed for an interview based on their performance in the national exam(s) and academic performance. The selection is based on the performance in the interview (in some Units, an aptitude test/preliminary interview may precede the final interview).

Note: Interviews will be held in-person only.

2. MASTER OF SCIENCE (M.Sc.)

2.1 Eligibility

| Programme | Qualifying degree and exams |
|--|--|
| Chemistry | Applicants possessing a minimum of 55% marks at the Bachelor's degree in any branch of Science with Chemistry as one of the major subject. |
| Inter-disciplinary Biosciences (with an option to specialize in Epigenetics and Diseases, Neurosciences, Human Disease Genetics, or Chemical Biology approach to understanding Disease Biology and Drug Discovery) | Applicants possessing a minimum of 55% marks at the Bachelor's degree in any branch of Biological Science with Chemistry as a significant subject and who have qualified for the Joint Admissions Test for Masters (JAM) 2025 and/or equivalent examination are eligible to apply. |

2.2 Selection procedure:

Shortlisting for interviews for Master of Science (M.Sc.) in Chemistry will be done based on the performance in Joint Admission test for Master's (JAM) 2025 or a written examination conducted by JNCASR.

For M.Sc. Inter-disciplinary Biosciences, shortlisted JAM candidates will be called for an interview directly. The final selection is based on the performance in the interview.

Note: Interviews will be held in-person only.

3. INTEGRATED Ph. D. PROGRAMME

3.1 Eligibility

| Disciplines | | Qualifying degree and exams |
|---|---|--|
| Physical Science (Specialization in Materials) | • | Students with minimum of 55% marks at bachelor's degree in any |
| | | branch of Science/Engineering with an aptitude for advanced |
| Web link for related information is available at | | physics education and materials research. |
| https://www.jncasr.ac.in/sites/default/files/users/ | • | Candidacy will be evaluated on past academic records and/or scores |
| user277/Int.%20PhD_Physical%20Sciences.pdf | | in national level exams |

| Chemical Science Biological Science | | Students with minimum of 55% marks at bachelor's degree in any branch of Science with Chemistry as one of the major and mathematics as a subject at least up to PUC (10+2 level) are eligible to apply. |
|--------------------------------------|--|--|
| | | Students with minimum of 55% marks in bachelor's or equivalent degree in Physical, Chemical or Biological Science (including Biotechnology, Pharmaceutical, Veterinary Sciences and Agricultural Sciences) or B.E/B. Tech degree or equivalent degree. |

3.2 Selection procedure

Shortlisting for interviews for selection for the Int. Ph.D. Physical Science Programme will be based on academic records, performance in the national level exams, statement of purpose mentioned in the application form.

Shortlisting for interviews for Int. Ph.D. Chemical Science Programme will be done based on the performance in Joint Admission test for Master's (JAM) 2025 or a written examination conducted by JNCASR.

The applications for the Int. Ph.D. Biological Science Programme will be screened based on overall academic performance for eligibility to attend an online entrance exam. The top candidates shortlisted after the exam will be invited to appear for interviews shortly afterwards.

The final selection for the Int. Ph.D. Degree Programme will be based on the performance in the interview.

Note: Interviews will be held in-person only.

4. POST GRADUATE DIPLOMA IN MATERIALS SCIENCE (PGDMS)

Postgraduate Diploma in Materials Science (PGDMS) is a full-time two semester (one-year) programme offered by the International Centre for Materials Science (ICMS), JNCASR. The training will be imparted through projects and formal courses. A stipend will be paid as per norms.

4.1 Eligibility

Candidates who have completed their M.Sc. in any branch of Science are eligible to apply.

4.2 Selection procedure

The applications received by the deadline will be scrutinized by the Committee and eligible/meritorious candidates will be shortlisted for offline interviews. Only a limited number of candidates will be selected based on the recommendation of a selection committee.

Note: Interviews will be held in-person only.

HOW TO APPLY

Applications for all the degree and diploma programmes mentioned above are available online. Only online applications will be considered.

APPLICATION FEE

The application fee is Rs. 1000/- and is non-refundable. The payment is to be made to the JNCASR bank account through NEFT. Service charges if any, must be borne by the applicant. Please visit the online admissions portal for beneficiary bank details.

IMPORTANT DATES

| Website opens for on-line submission of applications | 10.03.2025 |
|---|------------|
| Last date for submission of applications online (website closes at 23:59 hours on 10.04.2025) | 10.04.2025 |

Fellowships: All the regular students [except Master of Science (M.Sc.) in Chemistry and Master of Science (M.Sc.) in Inter-disciplinary Biosciences] joining JNCASR are eligible for a fellowship from JNCASR/ CSIR / UGC/ ICMR / DBT /INSPIRE depending upon their mode of entry.

The applicants are advised to visit the website **http://www.jncasr.ac.in/admission/degree-programmes** for details regarding degree programs and the areas of research carried out in the Research Units.

Admission portal for online submission of applications can be accessed at the following link https://www.jncasr.ac.in/admission/degree-programmes

A relaxation of 5% marks or its equivalent grade for those belonging to <u>SC/ST/OBC</u> (non-creamy layer)/PWD and Economically Weaker Section (EWS) categories.

Women candidates are strongly encouraged to apply.

Deputy Controller of Examinations