



University of Calcutta and Bose Institute Announcement

Integrated M.Sc.-Ph.D. Program in
Life Sciences and Physical Sciences 2025-26

ADVT. NO.: BI/MSc-PhD/07/2025-26

Integrated M.Sc.-Ph.D. Programme: Frequently Asked Questions (FAQ)

❖ About the Programme

- **What is the Integrated M.Sc.-Ph.D. Programme?**

The Integrated M.Sc.-Ph.D. Programme is offered in Life Sciences and Physical Sciences, combining a two-year (four semesters) M.Sc. course followed by a Ph.D. programme at Bose Institute. It aims to develop human resources with expertise in these areas and motivate young students to pursue careers in basic sciences and their applications. The programme offers a unique opportunity to learn cutting-edge research from the beginning of the academic journey. Expert mentorship and opportunities in interdisciplinary exploration will accelerate the research career of the incumbent.

- **Who offers this programme?**

The programme is jointly offered by Bose Institute, Kolkata, in collaboration with the University of Calcutta, Kolkata.

- **When were the Life Sciences and Physical Sciences programmes initiated?**

The Life Sciences programme began in September 2011, and the Physical Sciences programme started in August 2012.

- **What are the key highlights of the programme?**

Students will be taught and mentored by academicians from Bose Institute and other leading institutes in Kolkata and across India for a research career in modern biology and physics. They will receive extensive exposure to theoretical and experimental aspects, as well as computational techniques. Students are also encouraged to participate in institutional and journal club seminars, interactive sessions, and other scientific activities. All necessary institutional facilities, including library and internet, are available for student use.

- **What happens if a student successfully completes the M.Sc. curriculum but does not fulfil the eligibility criteria for the Ph.D. programme?**

Students who successfully complete the M.Sc. curriculum but fail to meet the Ph.D. eligibility criteria will be awarded an M.Sc. degree in Life Sciences or Physical Sciences, as applicable. This degree will be awarded jointly by Bose Institute and the University of Calcutta.

- **What is the duration of the programme?**

The integrated programme has a total duration of 2 years for the M.Sc. component followed by 4 years for the Ph.D. component.

- **When does the academic session for the M.Sc. curriculum start?**

The academic session for the M.Sc. curriculum begins in **August**, with the full session divided into four semesters of 26 weeks each. For the 2025-26 session, the classes are tentatively scheduled to start on **3rd September 2025**.

❖ Eligibility & Application

- **What are the eligibility criteria for applying to the programme?**

Candidates must hold a bachelor's degree from any recognized university, institute, or college with a minimum of 60% marks (55% for SC/ST/OBC-NCL/EWS/PwD). Additionally, they must have a valid score in JGEEBILS (for Life Sciences) or JEST (for Physical Sciences) or JAM, as applicable, with validity on the closing date of application receipt. CUET (PG) qualified candidates with a valid score and active validity period are also eligible to apply.

- **Can I apply if my final undergraduate examination results are awaited?**
Yes, candidates whose final examination results are awaited may still apply based on their last examination's results. However, their admission will be conditional upon securing the qualifying marks in the final undergraduate examination.
- **How do I apply for the programme?**
Candidates must **apply online through the application portal**. An application fee is required.
- **What is the application fee?**
The application fee is **₹1000 for UR/OBC/EWS candidates** and **₹500 for SC/ST/PwD candidates**. This fee is non-refundable.
- **How should I pay the application fee?**
The application fee may be paid via net banking using the account details provided in the admission advertisement, or by scanning the QR code mentioned therein.
- **How do I receive the payment receipt?**
The payment receipt can be collected from the Cash Section at the Unified Campus of Bose Institute, starting seven days after the date of transaction.
- **What documents need to be submitted with the application?**
Copies of all certificates and testimonials pertinent to the eligibility criteria should be submitted in PDF format through the application portal.
- **What are the important dates for the 2025-26 academic session admission?**
 - **Last date for submission of online application:** 6th August 2025
 - **Online announcement of candidates shortlisted for interview (tentative):** 8th August 2025
 - **Dates of interview:** 18th-20th August 2025
 - **Online announcement of selected candidates for admission (tentative):** 25th August 2025
 - **Date of admission (tentative):** 2nd September 2025
 - **Session start date (tentative):** 3rd September 2025

❖ **Selection & Interview**

- **How are students selected for admission?**
Students will be admitted based on their **academic record and performance in the interview**. Canvassing or attempts to influence will lead to disqualification. The Institute Authority reserves the right to reject any application without assigning a reason.
- **How will I know if I am shortlisted for an interview?**
The names of shortlisted candidates will be uploaded on the official website of Bose Institute (www.jcbose.ac.in).
- **What should I bring to the interview?**
All original certificates and testimonials should be produced for verification at the time of the interview.
- **Will Bose Institute provide travel allowance (TA/DA), accommodation, or support for attending the interview?**
No TA/DA, accommodation, or support will be available from Bose Institute for attending the interview.
- **Are the interviews conducted online or in-person?**
Interviews will be held **in-person only**. Applicants should be prepared to stay the whole day on the interview day.

❖ **Admission & Fees**

- **How will I be informed if I am selected for admission?**
The names of selected candidates will be uploaded on the **official website of Bose Institute** (www.jcbose.ac.in), and selected candidates will also be **intimated through their registered email**.
- **What documents are required at the time of admission?**
Self-attested printed copies of certificates/testimonials are to be submitted, and **all original certificates and testimonials must be produced for verification** at the time of admission.
- **What happens if a student leaves the programme before completing two years?**
Students leaving the programme before completing two years **must refund the entire scholarship money received**. Each student is required to sign a bond in this regard.

- **What is the full fee structure for the M.Sc.-Ph.D. Programme?**

The fee structure is as follows:

- **Application Fee:** ₹1000 (UR/OBC/EWS), ₹500 (SC/ST/PwD) - One time, Non-refundable.
- **Admission Fee:** ₹1000 (UR/OBC/EWS), Nil (SC/ST/PwD) - One time, Non-refundable.
- **Caution Money (Laboratory):** ₹12000 (All candidates) - One time, Refundable at the end of the course.
- **Caution Money (Library and Computer):** ₹3000 (All candidates) - One time, Refundable at the end of the course.
- **Tuition Fee:** ₹6000 (UR/OBC/EWS), ₹3000 (SC/ST/PwD) - Per semester, Non-refundable.
- **Hostel Seat Rent:** ₹2000 (All candidates) - Per month, Non-refundable. Hostel facility is subjected to availability.

- **Is the security deposit refundable?**

Yes, the security deposit is refundable at the end of the course (M.Sc. or Ph.D.), provided there are no outstanding dues.

❖ **Fellowship**

- **Is there a fellowship available for M.Sc. students?**

Yes, during the first two years (M.Sc.), all students are offered a fellowship of Rs. 12000/- per month (consolidated).

- **What are the conditions for the continuation of the M.Sc. fellowship?**

The fellowship continues if a student secures a minimum SGPA of B+ grade (or minimum 60% marks in aggregate) and no F grade in any individual paper of the previous semester. Additionally, the student must have at least 80% attendance in classes in the previous semester.

- **How is the Ph.D. fellowship secured?**

Eligible students (see below) are expected to secure fellowship for the Ph.D. course through the National tests. However, the Institute will provide a Ph.D. fellowship if students fail to secure their own fellowship; otherwise, they are eligible for admission to the PhD programme at the Bose Institute. Fellowship amount during the Ph.D. period will be according to the rules and regulations of the Department of Science and Technology, Government of India.

❖ **Curriculum and Examination Structure**

- **What specializations are available in the M.Sc. curriculum for Life Sciences?**

The Life Sciences programme offers specializations in:

- Molecular & Cellular Biology
- Plant Molecular Biology & Biotechnology
- Biophysical Chemistry
- Computational & Systems Biology

Any or all of the specialized courses may not be offered each academic year.

- **What specializations are available in the M.Sc. curriculum for Physical Sciences?**

For Physical Sciences, specialization is available in the form of a one-semester project in one of the following areas:

- High Energy Physics, Astrophysics and Cosmology
- Space Science, Fluid Mechanics and Solar Physics
- Condensed Matter Physics and Complex Systems

Any or all of the specialized courses may not be offered each academic year.

- **What is the medium of instruction and examination?**

The medium of instruction and examination shall be **English**.

- **How many examinations are there in the M.Sc. course?**

There are **four examinations** in the M.Sc. course over two years, corresponding to the completion of each semester's coursework. These include mid-semester and end-semester examinations.

- **How are students evaluated for different types of papers?**

Evaluation is done as follows:

- **Theory Papers:** Continuous Internal Assessment (10% - 5% attendance, 5% assignments), Mid-Semester Examination (20%), End-Semester Examination (70%).

- **Experiment/Computation Papers:** Continuous Internal Assessment (10% - 5% attendance, 5% assignments), Mid-Semester Examination (20%), End-Semester Examination (60% - 10% Theory, 15% Data, 15% Analysis, 20% Viva).
- **Project and Dissertation:** Continuous Internal Assessment (10% - 5% attendance, 5% assignments), Mid-Semester Viva (15%), Mid-Semester Presentation (15%), End-Semester Viva (25%), End-Semester Presentation (25%), End-Semester Report (10%).
- **Comprehensive Viva:** End-Semester Examination (100%).

- **What are the attendance requirements?**

A candidate must attend at least 80% of theory, practical, and tutorial classes in each course to be deemed to have pursued a regular course of study. If attendance is less than 80% but at least 60%, condonation may be granted by a competent authority in deserving cases. Candidates with less than 60% attendance are not allowed to appear in the examination and must continue from the same semester in the next year.

- **What are the grading criteria?**

A ten-point credit system is adopted, with a pass grade point of 4.000. Letter grades range from O (Outstanding, 9.00-10.00 GP) to F (Fail, 0.00 GP for marks < 40%). The Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) are calculated based on credits earned and grade points. A CGPA of 4.000 or more is required to pass the M.Sc. course.

- **What are the passing criteria for the M.Sc. course?**

The passing criterion is to obtain a P grade (Pass) in each and every paper in all four semesters. A candidate is required to clear all semesters within a span of four years from the admission year; otherwise, enrolment will be cancelled.

- **Are there options to re-appear for examinations if a student fails or is absent?**

A candidate who is eligible for the end-semester examinations of the 1st and 2nd semesters but does not appear or fails a paper may reappear in the next equivalent end-semester examination. For the 3rd and 4th semesters, candidates can appear in supplementary examinations for failed papers, scheduled after the 4th semester results are declared.

- **Can I apply for a review of my examination papers?**

Yes, candidates seeking review may apply within seven working days from the date of issue of the Grade Card. The application for review is restricted to theoretical papers only, and a maximum of two theoretical papers in any semester examination may be re-examined, provided the student secures a minimum of P grade in the rest of theoretical and computational papers.

- **What are the norms for admission to Ph.D. course at Bose Institute**

Eligible students are expected to secure self-funding for the Ph.D. Course through National tests.

Admission to the Ph.D. course at Bose Institute is subjected to the following conditions:

- (i) A candidate who would obtain 60% or above marks in aggregate in 1st, 2nd and 3rd semesters and at least 75% marks in the project work in the 4th semester, will be allowed to continue for Ph.D. degree under the guidance of a particular supervisor. They will also be declared as have passed M.Sc. examination.
- (ii) A candidate must qualify either in CSIR-UGC NET, GATE or equivalent examinations conducted by Central Government Departments and their Agencies and Institutions such as CSIR, UGC, DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISC, IISER for enrollment to the Ph.D. programme.
- (iii) An eligible faculty member at Bose Institute having vacancy for registration of Ph.D. student under his/her direct supervision, as per the guideline of the UGC, GoI, is willing to accept the student under his/her guidance.

❖ Institutions and Facilities

- **When was Bose Institute founded and by whom?**

Bose Institute was founded by Acharya Jagadish Chandra Bose on 30th November 1917, with the purpose of fully investigating "the many and ever opening problems of the nascent science which includes both life and non-life".

- **When was the University of Calcutta established?**

The University of Calcutta was established on 24th January 1857.

- **What are the contact details for the programme?**

You can contact the Dean, Student Affairs at Bose Institute, Kolkata: Phone: 033-25693340 or Email: dean_office@jcbose.ac.in.

- **What facilities are available to students at Bose Institute?**

Bose Institute is known for its cutting-edge instrumentation facilities and modern laboratories.

Some of the facilities available include:

- Laboratory on communications
- Plasma Physics Laboratory
- Space Science Laboratory
- Cosmic Ray Laboratory
- Raman Spectroscopy Laboratory
- NMR facility
- Computer laboratory
- Library
- Central Instrument Facilities harbouring hundreds of different instruments.
- Multiple Experimental Farms
- Animal house
- Auditorium, Canteen, Game room and robust administrative support.

❖ **Filling Application Form**

- **What should I do if I see an error message while submitting my form and cannot complete the submission?**

- Clear your browser's cache and temporary internet files, then restart your computer before attempting to submit again.
- If the issue persists, please try submitting your application using a different browser such as Microsoft Edge, Opera, or Mozilla Firefox.
- We're here to help—feel free to send an email to dean_office@jcbose.ac.in for further assistance.