

# Indian Institute of Science (IISc) Bangalore-560012 (India) भारतीय विज्ञान संस्थान बैंगलोर- 560012 (भारत) वेबसाइट/Website: www.iisc.ac.in

No.: IISc/Acad/Admission/2023/82

Date: 24.01.2023

# Admission Notice for P. G. / Ph. D. Programmes for the Academic Year 2023-24

## (Session starting from August 2023)

Applications are invited from eligible applicants for admissions to regular (1) Research Programmes [Ph D / M Tech (Research)] (2) Course Programmes in Engineering [M Tech/M Des/M Mgt], (3) Course Programmes in Science [M Sc in Life Sciences; and M Sc in Chemical Sciences], (4) Integrated Ph D Programmes, and (5) External Registration Programme [Ph D/M Tech (Research)]. The gist of the admission operations is given in the following paragraphs. Applicants are advised to go through the eligibility criteria, specializations, areas of research, selection procedure and other details available at separate links on the IISc website (ie, <a href="https://www.iisc.ac.in">https://www.iisc.ac.in</a> → Admissions → Programmes).

Applicants possessing the educational qualification 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 dissertation, viva-voce etc.) by **31 July 2023**, and **can furnish the necessary certificates on and before 31 October 2023 are eligible to apply.** 

#### 1. RESEARCH PROGRAMMES [Ph D/M Tech (Research)]

#### 1.1 Departments / Areas

**Ph D in Science Faculty:** Astronomy & Astrophysics, Biochemistry, Ecological Sciences, High Energy Physics, Inorganic & Physical Chemistry, Materials Research, Mathematics, Microbiology & Cell Biology, Molecular Biophysics, Developmental Biology and Genetics (Molecular Reproduction, Development & Genetics), Neurosciences, Organic Chemistry, Physics, and Solid State & Structural Chemistry.

M Tech (Research) and Ph D in Engineering Faculty: Aerospace Engineering, Atmospheric & Oceanic Sciences, Chemical Engineering, Civil Engineering, Computer Science & Automation, Earth Sciences, Electrical Communication Engineering, Electrical Engineering, Electronic Systems Engineering, Instrumentation and Applied Physics, Management Studies (Ph D only), Materials Engineering, Mechanical Engineering, Nano Science and Engineering (Ph D only), Product Design & Manufacturing, Sustainable Technologies, and Computational & Data Sciences.

**Ph D in Interdisciplinary areas:** BioSystems Science and Engineering (offered by Centre for Biosystems Science and Engineering), Energy (offered by Interdisciplinary Centre for Energy Research), Mathematical Sciences (offered by IISc Mathematics Initiative), Water Research (offered by Interdisciplinary Centre for Water Research), Cyber Physical Systems (offered by

Robert Bosch Centre for Physical Systems), Climate Change (offered by Divecha Centre for Climate Change), Brain and Artificial Intelligence (offered by Brain, Computation, and Data Science group).

# 1.2 Eligibility: Applicants possessing a minimum of second class or equivalent in the following degrees as applicable to the individual departments / areas are eligible to apply:

Sl. No.	Qualifying degree	Qualifying in national entrance tests (Mode of entry)
1	Bachelor's degree in Engineering/ Technology/ 4-year Bachelor of Science	Valid GATE score / NET JRF* is mandatory
2	Master's degree in Science / Master's degree in Economics, Geography, Psychology, Management, Commerce, Operations Research, Computer Science / Application	Valid GATE score / NET JRF is mandatory
3	Master's degree in Engineering / Technology / Architecture/ Agriculture / Pharmacy / Veterinary Sciences	Desirable to have valid GATE score / NET JRF/GPAT.
4	MS/MBA (post BE/B Tech/M Sc) – (applicable for the department of Management Studies/Ecological Sciences)	
5	Graduates of any course with a minimum duration of FOUR years, from any Centrally Funded Technical Institution (including IIITs in PPP mode) with a minimum CGPA of 8 out of 10 or its equivalent (for Ph D only)	Desirable to have valid GATE score / NET JRF.
6	MBBS/MD/MDS/Pharm D	Desirable to have valid GATE score/NET JRF.
7	B Pharm	Valid GPAT score/JRF
8	BE / B Tech. equivalent examinations of Professional Societies, recognized by MoE/UPSC/AICTE (e.g. AMIE by Institutions of Engineers).  Note: Candidates enrolled upto 31.05.2013 with professional societies (e.g AMIE) recognized by MoE are only eligible to apply.	,

#### **Notes**

- 1. The GATE/GPAT/NET JRF/other National entrance test passing certificate/score card should be valid as on 01 August 2023.
- 2.\*NET JRF includes –Joint CSIR-UGC NET for JRF; UGC-NET for JRF; DBT JRF; ICMR JRF; JEST; NBHM Research Award; INSPIRE. Applicant must be qualified for Junior Research fellowship (JRF) to be eligible to apply through NET JRF mode.
- 3. Applicant applying through INSPIRE mode must be in possession of **valid provisional INSPIRE offer for consideration of their application at leve**l **II** of the selection, issued by DST

at the time of interview).

- 4. Applicant who has qualified in Joint Graduate Entrance Examination for Biology and Interdisciplinary Life Sciences-2023 (JGEEBILS) are also eligible to apply.
- 1.3 Selection procedure: Candidates are shortlisted for an interview based on their performance in the National Entrance Test and/or the qualifying degree as detailed in the above table. The selection is based on the performance in the interview (in some of the departments, an aptitude test/preliminary interview will precede the interview/Final Interview).

### 2. COURSE PROGRAMMES IN ENGINEERING [M Tech/MDes/ MMgt]

#### 2.1 M Tech Programmes

#### 2.1.1. - Departments / Programmes and Selection Procedure

Departments/Programmes	Selection procedure
Aerospace Engineering, Chemical Engineering, Civil Engineering, Materials Engineering	Based on 100% GATE score
Bioengineering, Earth and Climate Sciences, Electrical Engineering, Electronics and Communication Engineering, Electronic Product Design, Electronic Systems Engineering, Instrumentation Systems, Mechanical Engineering, Microelectronics and VLSI Design, Mobility Engineering, Quantum Technology, Robotics and Autonomous Systems, Semiconductor Technology, Signal Processing, Smart Manufacturing	Based on 70% GATE score + 30% performance in interview
Artificial Intelligence, Computer Science and Engineering	Based on 70% GATE score + 30% performance in written test
Computational & Data Sciences	Based on 70% GATE score + 30% performance in written test and interview

#### 2.1.2 Eligibility

Applicants possessing a minimum of Second Class or equivalent in a bachelor's degree in an appropriate field of Engineering/ Technology *or* \*B.E./B.Tech./B.Arch. equivalent examinations of Professional Societies, recognized by MoE/UPSC/AICTE(e.g AMIE by Institutions of Engineers). or Master's degree in Physical Sciences, Mathematics, Statistics, Geology, Instrumentation, Electronics, Computer Applications as applicable to individual departments / programmes with a **valid GATE 2021/2022/2023 score** are eligible to apply.

**Note**: \*Candidates enrolled up to 31.05.2013 with professional societies (e.g AMIE) recognized by MoE/UPSC/AICTE are only eligible to apply.

- **2.1.3** M Tech programmes schedule for written test and interview will be given on the IISc website <a href="https://www.iisc.ac.in/admissions">www.iisc.ac.in/admissions</a> under Important Dates.
- **2.1.4 Common Offer Acceptance Portal (COAP)** provides a common platform for the candidate to make the most preferred choice for an admission into M.Tech Programmes through GATE in participating institutions (IISc & IITs). Admission offers for M Tech programmes of IISc for all the above disciplines and also for M.Des. (from GATE stream) will be made on COAP. Candidates will have to register on COAP and must update the COAP registration number on Applicant's Interface. Please visit the COAP 2023 website to register as per the instructions given therein.
- **2.1.5 Sponsored candidates** from Defence, BARC, DRDO, ISRO, NAL, NTRO, KSRTC, BMTC, BDA, PWD, CPRI, ACIWRM: Water Resource Dept (WRD) GoK, Ministry of Water Research

(MOWR) and Central water Commission (CWC) under DRIP Project, applying for a course programme under the sponsored category must compulsorily fill an online application form and submit the printed version, in duplicate, on or before 29 March 2023.

# 2.2. Master of Design (M Des) in Product Design and Engineering offered by the Centre for Product Design and Manufacturing

#### 2.2.1 Eligibility

Applicants possessing a minimum of second class in Bachelor's degree in Engineering / Technology Design/Architecture with valid GATE-2021/2022/2023 or CEED 2023 score as on 01 August 2023 are eligible to apply.

**2.2.2 Selection procedure**: Candidates will be shortlisted for design aptitude test and an interview based on the GATE / CEED score as per the schedule given on the IISc website under Important Dates. Selection will be based on 70% GATE / CEED + 30% performance in design aptitude test and interview. The announcement of the results and issue of admission offers for candidates based on GATE score will be through COAP, and for those based on CEED offer letters will be sent directly to the candidates by the Institute. Therefore, the candidates with GATE are required to register on COAP as detailed at section 2.1.4

#### 2.3 Master of Management (M Mgt)

#### 2.3.1 Eligibility

Applicants possessing a minimum of first class or equivalent in Bachelor's degree in Engineering / Technology or equivalent with a valid GATE-2021/2022/2023 or CAT 2022 or GMAT scores as on 01 August 2023 are eligible to apply.

#### 2.3.2 Selection procedure:

Candidates will be short-listed for interview based on GATE / CAT /GMAT scores as per the schedule given on the IISc website under Important Dates. Selection will be based on 15% (GATE / CAT / GMAT scores) + 15% UG performance + 30% Communication skill + 40% performance in interview.

## 3. COURSE PROGRAMMES IN SCIENCE [M Sc]

#### 3.1 Eligibility

Disciplines	Educational qualification	Qualifying examination
(1) Life Sciences	A minimum of first class or equivalent in Bachelor's or an equivalent degree in Physical, Chemical or Biological Sciences (including Biotechnology, Pharmaceutical, Veterinary Sciences and Agricultural Sciences) or  A minimum of first class or equivalent in BE/B Tech degree.	JAM 2023 in Biotechnology (BT) or Chemistry (CY) or Mathematics (MA) or Physics (PH) paper  GATE in Biotechnology (BT), Biomedical Engineering (BM), Electronics Communication Engineering (EC), Ecology (EY), Mathematics (MA), Physics (PH), Life Sciences (XL) Paper
(2) Chemical Sciences	A minimum of first class in B.Sc. or an equivalent degree with Chemistry as one of the main subjects with Mathematics at the PUC or Plus 2 level.	JAM 2023 in Chemistry (CY) Paper

3.2 Selection procedure: (1) Life Sciences - Candidates will be short listed for interview based on their JAM 2023/GATE-2021/2022/2023 score, final selection will be based on performance in interview. Selection for (2) Chemical Sciences - Selection will be based 100% performance in the JAM 2023 CY score.

### 4. INTEGRATED Ph D PROGRAMMES

#### 4.1 Eligibility

Disciplines	Educational qualification	Qualifying examination
Biological Sciences	A minimum of first class or equivalent in Bachelor's or an equivalent degree in Physical, Chemical or Biological Sciences (including Biotechnology, Pharmaceutical, Veterinary Sciences and Agricultural Sciences) or A minimum of first class or equivalent in BE/B Tech degree.	JAM 2023 in Biotechnology (BT) or Chemistry (CY) or Mathematics (MA) or Physics (PH) Biotechnology (BT)
Chemical Sciences	A minimum of first class in B.Sc. or an equivalent degree with Chemistry as one of the main subjects with Mathematics at the PUC or Plus 2 level.	JAM 2023 in Chemistry (CY) or Physics (PH)
Mathematical Sciences	A minimum of first class or equivalent in B Sc or equivalent degree with Mathematics as one of the subjects or BE/BTech or equivalent degree.	JAM 2023 in Mathematics (MA) or Mathematical Statistics (MS)
Physical Sciences	A minimum of first class or equivalent in B.Sc. or an equivalent degree with Physics as one of the main subjects or BE/B Tech or equivalent in any discipline.	JAM 2023 in Physics (PH) or JEST 2023

**4.2 Selection procedure**: Candidates will be short listed for interview based on their JAM 2023 score for all the four disciplines, and those cleared JEST 2023 for Physical Sciences. Selection for (a) Chemical Sciences will be based on the performance in the interview; (b) Biological, Physical and Mathematical Sciences will be based on combined performance in the qualifying examination and interview.

# 5. <u>External Registration Programme (ERP) [Ph D/M Tech (Research)]</u>

This programme is meant for (1) professionals from R&D Organizations / Industries and (2) Faculty members from Engineering, Agricultural, Pharmaceutical, Veterinary, Medical Colleges/ Universities, recognized by the appropriate government agencies.
5.1 Eligibility

The educational qualifications remain the same as for the regular candidates. Qualifying in one of the national entrance tests like CSIR-UGC NET for JRF, UGC-NET for JRF, DBT JRF, ICMR JRF, GATE, NBHM is desirable but not mandatory. Further, the candidate should have completed two years of full-time employment in the current organization after completion of degree. The candidates must be officially sponsored by their employing organizations and compulsorily fill an online application form and submit the printed version, in duplicate, on or before 29 March 2023. For the detailed eligibility criteria, please visit IISc website.

**5.2 Selection procedure**: Based on the performance in an Interview.

#### **HOW TO APPLY**

Applications for all the programmes mentioned above are available **online**. To apply online visit  $\underline{www.iisc.ac.in} \rightarrow \mathbf{Admissions} \rightarrow \mathbf{click} \ \mathbf{Apply} \ \mathbf{Online}$ .

#### **APPLICATION FEE**

Category	Application Fee*	
General / OBC / EWS (economically weaker section)	Rs. 800	
SC / ST / PwD (person with disability)	Rs. 400	
ERP candidates (all categories)	Rs. 2000	
Sponsored candidates from organization mentioned above (as per para 2.1.5)	Rs. 800	
*The fee is non-refundable; any bank or payment gateway service charges must be borne by the applicant.		

Payment options: Online payment through net-banking, debit card, credit card.

#### **IMPORTANT DATES**

Website opens for on-line submission of applications	01.02.2023
Last date for online submission of applications (website closes at 23:59 hours on 23.03.2023)	23.03.2023

Note: For updated information, please visit IISc website (www.iisc.ac.in)

#### Notes:

- 1. Reservation/concession/relaxations for SC/ST/OBC/EWS/Person with disability (PwD) and Kashmiri-Migrant (KM), Kashmiri Pandits/Kashmiri Hindu Families (Non Migrants) living in the Kashmir valley: As per Government of India regulations.
- 2. The minimum class prescribed in the qualifying examination is relaxed to a "Pass Class" for SC/ST candidates.
- 3. Applicant applying under EWS/OBC (as per central list of OBC available at <a href="www.ncbc.nic.in">www.ncbc.nic.in</a>) category must ensure that they are in possession of valid EWS/OBC-NCL Certificates issued after 31 March 2023 (i. e. FY: 2023-24) at the time of interview and admission.
- 4. Scholarships: All the regular PG/PhD students (except M.Sc and M.Mgt) who join the Institute are eligible for scholarship from MHRD/CSIR/UGC/ICMR/DBT/DST/AICTE/DAE (NBHM) depending upon their mode of entry. Scholarships from many Indian and multinational agencies, and business houses are also available for meritorious students.

IISc has many merit-based private/donor fellowships that provide enhanced monthly fellowship (upto two times) for course (M.Tech.) and Research (M.Tech. (Research)/Ph.D.) programs of IISc. Further details including entitlements can be accessed here: <a href="https://odaa.iisc.ac.in/fellowships-consolidated/">https://odaa.iisc.ac.in/fellowships-consolidated/</a>.

5. The applicants are advised to visit the website <a href="www.iisc.ac.in/admissions">www.iisc.ac.in/admissions</a> and admission portal regularly for admission related updates/all further updates shall be published/updated only on IISc website/admission portal. Applicants are also advised to visit the department website to which they are applying to familiarize themselves with complete admission related matters, areas of research, etc.

**REGISTRAR** 

\*\*\*\*\*