



# INDIAN INSTITUTE OF TECHNOLOGY ROORKEE ROORKEE

## Rolling Advertisement for Ph.D. Admission

The guidelines for Ph.D. Admission through rolling advertisement are as under:

### ELIGIBILITY CRITERIA:

- Candidates should be recipient of any one fellowship namely UGC/CSIR/DBT/DST/Inspire/ICMR etc.
- The result of fellowship should have been declared after the deadline of advertisement of Ph.D. admissions with institute assistantship in Autumn / Spring semester (i.e. last week of Feb-March / September respectively). **The deadline for Autumn Semester 2018 was March 20, 2018.**
- Masters degree or equivalent in respective discipline with a minimum Cumulative Grade Point Average (CGPA) of 6.00 on a 10 point scale or equivalent as determined by the Institute wherever letter grades are awarded; or 60% marks in aggregate (of all the years/semesters) where marks are awarded, for the GENERAL (UR)/OBC category.

OR

B.Tech. / B.Arch. degree or equivalent in respective discipline from CFTIs with excellent academic record (with a minimum CGPA of 7.00 on a 10 point scale or 70% marks).

- The admission eligibility requirements may be relaxed to 5.5 on a 10 point scale or equivalent, or to 55% marks to the following categories:
  - a. SC/ST candidates with Master's degree or equivalent degree.
  - b. Any category of PD (Persons with different abilities) candidate holding Master's degree or equivalent degree.

### NOTE:

1. Candidates can apply only once through the rolling advertisement. If he/she wants to apply more than once, he/she may apply through the regular advertisement.
2. Institute will not provide any financial assistance at any point of time
3. *GATE/GPAT qualified candidates are required to apply through regular advertisement released during September and February every year through online portal <http://pgadm.iitr.ernet.in/>.*

**MINIMUM QUALIFICATION FOR ADMISSION TO Ph.D. PROGRAMME IN DIFFERENT DISCIPLINES ARE AS UNDER:**

**A. ROORKEE CAMPUS**

**1. Alternate Hydro Energy Centre**

- i. B.Tech./ M.Tech. or equivalent in Civil/ Electrical / Mechanical/ Industrial/ Chemical/ Environmental/ Agricultural/ Computer/ Electronics Engineering
- ii. M.Sc. in disciplines consistent with research areas of the centre.

**2. Architecture & Planning**

Master's degree in Architecture in any of the specializations offered by recognized Institutions of Architecture/Master's degree in Building Science/Technology with a Bachelor's degree in Architecture/Master's degree in Planning in any of the specializations offered by the recognized Institutions of Planning with a Bachelor's degree in either Architecture or Planning (B.Planning) or Civil Engineering.

**3. Department of Biotechnology**

- i. Master's degree in any disciplines of Science
- ii. Bachelor's/ Master's degree in medical sciences, engineering, pharmacy, veterinary and related disciplines.
- iii. MD/MS in Ayurveda

**4. Department of Civil Engineering**

- i. B.Tech/M.Tech. or equivalent degree in Civil Engineering. Candidate having an M.Tech. Degree but not having a Bachelor's degree in Engineering must have studied Mathematics at the Bachelor's level.
- ii. B.Tech./M.Tech. degree in any branch of Engineering may be considered for research areas consistent with the academic background and experience.
- iii. M.Sc. Degree in any branch of Science or MCA (with mathematics at the Bachelor's level for both M.Sc. and MCA) may also be considered for research areas in Geomatics Engineering.

**5. Department of Chemical Engineering**

- i. B.Tech./M.Tech. or equivalent degree in Chemical Engineering.
- ii. B.Tech./M.Tech. or equivalent degree in any branch of Engineering/ Chemical Technology and interdisciplinary areas.
- iii. M.Sc. in disciplines consistent with the research areas of the department.

**6. Department of Chemistry**

- i. M.Sc. or equivalent degree in Chemistry/ Physics.
- ii. M.Sc. in Bio-technology or M.Sc. in Biochemistry

**7. Department of Computer Science and Engg**

- (i) M.E./M.Tech. in Information Technology/ Computer Science & Engg./ Software Engg. or equivalent.

- (ii) M.Tech./ME in Electrical Engineering/Electronics and Communications Engineering or equivalent
- (iii) B.E./ B.Tech. in Computer Sc. & Engg./ Information Technology or equivalent.

### **8. Department of Electronics and Communication Engineering**

- (i) ME. / M.Tech. in Microelectronics/ VLSI / Microwaves / Communication Systems/ Control Systems/Instrumentation/Circuits & Systems or equivalent
- (ii) B.E./ B.Tech. in Electronics & Communication/ Electrical Engg. Or equivalent.
- (iii) M.Sc. in Physics/Instrumentation/Electronics.
- (iv) B.Tech + M.Tech in Computer Science

### **9. Earthquake Engineering**

- i B.Tech. / M.Tech. or equivalent degree in Civil Engineering/ Earthquake Engineering / any branch of Engineering .
- ii M.Sc./ M.Tech. in Geophysics/ Physics/ Mathematics/ Geology for research areas in Engineering Seismology and Seismotectonics.

### **10. Department of Earth Sciences**

M.Sc / M.Sc.Tech / M.Tech. degree in Geology / Geophysics / Applied Geology / Applied Geophysics / Geological Technology / Geophysical Technology / Geosciences / Applied Geosciences / Petroleum Geology / Petroleum Geophysics.

### **11. Department of Electrical Engineering**

- i. B.Tech./M.Tech. or equivalent degree in Electrical Engineering.
- ii. B.Tech./M.Tech. or equivalent degree in a branch of Engineering consistent with the research areas as mentioned by the Department from time to time.
- iii. M.Sc. in a discipline consistent with the research areas as mentioned by the Department from time to time.

### **12. Department of Humanities and Social Sciences**

- i. M.A. or equivalent degree.
- ii. Master's degree in Science/Graduate Degree in Engineering/ Technology with 60% marks (or equivalent grade) may be considered for research areas consistent with the academic background and special interests.

### **13. Hydrology**

- i. Master's degree in Civil Engg./ Water Resources Development/Hydrology.
- ii. Master's degree in Agricultural Engg./ Environmental Engg./Instrumentation/water use management
- iii. M.Sc./M.Tech. in Geology/Geophysics/Soil Science/Forestry or natural Resources/ Chemistry/ Meteorology/ Atmospheric Physics/ Mathematics/Nuclear Physics & Environmental Sciences
- iv. M.Sc. Hydrology with Mathematics at Bachelor's level

### **14. Department of Management Studies**

- i. B.E./B.Tech. or equivalent, M.E./ M.Tech or equivalent qualifications.
- ii. M.Sc./M.A./M.Com.

iii. Master of Management/M.B.A. or equivalent.

**15. Department of Mathematics**

- i. M.A./M.Sc./M.Tech. in Mathematics/ Applied Mathematics/ Industrial Mathematics / Statistics/ Operation Research/ Applied Operation Research/ Mathematics and Computing.
- ii. M.Stat. or Equivalent

**16. Department of Mechanical & Industrial Engg.**

- i. B.Tech./ M.Tech. degree or equivalent degree in Mechanical/ Industrial/ Production Engg.
- ii. B.Tech./ M.Tech. degree in Aerospace/ Chemical/ Civil/ Electrical/ Metallurgical Engg. may be considered for research areas consistent with the academic background and special interests.

**17. Department of Metallurgical and Materials Engineering**

B.Tech/M.Tech or equivalent relate to the following disciplines:

Metallurgical Engg, Materials Engg, Nanotechnology, Engg Physics, Engg Chemistry, Ceramics, Polymers, Corrosion, Mechanical, Production & Industrial Engg., Chemical Engineering and Electrochemical Engg. Or

1. M.Sc. degree in Physics, Chemistry, Materials Science.
2. Candidates with a M.Sc. degree, Mathematics as a subject at B.Sc. degree level is an essential requirement.

**Note: Candidates having a degree in Industrial Engineering only, shall not be eligible for admission to the Doctor of Philosophy programme in the Department of Metallurgical and Material Engg.**

**18. Department of Physics**

- i. M.Sc. in Physics/ Applied Physics
- ii. M.Sc. in Chemistry/ Mathematics/ Biophysics/ Geophysics/ Computer Science, provided Physics was a subject at B.Sc. level.
- iii. B.Tech. or equivalent in Electrical/ Electronics/ Chemical/ Metallurgical/ Engineering Physics.

Candidates at Category (ii) and (iii) may be considered for research area consistent with the academic background and special interests.

**19. Water Resources Development & Management**

**i Water Resources Development**

B.E./ B.Tech. /M.E./ M.Tech. or equivalent degree in Civil, Electrical, Mechanical & Agricultural Engineering.

**ii Irrigation Water Management**

Master's Degree in Agricultural Sciences/ Social Sciences/ Chemical Engineering/ Biological Sciences/ Environmental Sciences/ Engineering/ Natural Sciences with at least one paper of Mathematics at the graduate level.

## **20. Institute Instrumentation Centre**

M.Sc./M.Tech. in Physics, Applied Physics, Material Science, Chemistry, Electronics & Nanotechnology with NET/GATE.

## **21. Centre for Transportation Systems (CTRANS)**

M.Tech./ M.Arch./ M.Planning/ M.Des./ MBA or equivalent degree in Civil Engg./ Mechanical Engg./ Industrial Engg./ Production Engg./ Computer Science & Engg./ Chemical Engg./ Infrastructure Systems/ Biotechnology/ Architecture/ Planning/ Urban Engg./ Business Administration.

## **22. Disaster Mitigation & Management**

M.Tech. (Civil, Mechanical & Industrial, Chemical, Computer Science), M.Arch. & M.Planning or equivalent. Or

M.Tech. in Geological Technology, Geophysical Technology, Biotechnology or equivalent.  
Or

M.B.A. or M.C.A. in Computer Science or M.Sc. in Physics, Geophysics, Geology, Mathematics, Environmental Sciences (with Maths in B.Sc.), M.Tech. Bio-technology or equivalent.

## **23. Centre for Nanotechnology**

- (i) B.E./B.Tech or M.E./M.Tech. in Metallurgy / Chemical / Polymer / Mechanical / Biotechnology / Physics / Chemistry / Electronics /Electrical./Civil or equivalent
- (ii) M.Sc./M.S. (Science/Engineering)
- (iii) B. Pharm /M. Pharm.

## **B. SAHARANPUR CAMPUS**

### **1. Applied Science & Engineering:**

- (i) M.Sc. /M.S./M.A. (Science/ Engineering/ Humanities)
- (ii) BE/B.Tech/M.E./M.Tech. in any branch of engineering or equivalent

### **2. Pulp & Paper Engineering:**

- (i) M.Sc. /M.S. (Science/Engineering)
- (ii) BE/B.Tech/B.Pharm/M.E./M.Tech./M.Pharm. in any branch of engineering or equivalent

### **3. Polymer and Process Engineering:**

- (i) M.Sc. /M.S./MBA (Science/ Engineering/ Management)
- (ii) BE/B.Tech/B.Pharm/M.E./M.Tech./ M.Pharm in any branch of engineering or equivalent

## HOW TO APPLY

The candidate is required to register and fill the application online from by accessing <http://pgadm.iitr.ernet.in>. After finalizing the application and depositing the fee online, download the filled application. The requisite fee (Rs. 200/- for GEN/OBC and Rs. 100/- for SC/ST/PD category candidates per department) can be paid online using net banking or debit/credit card facilities. Additional charges will be applicable as per the rule of the concerned bank.

**Before applying, candidates are advised to read the Ph.D. guidelines for Rolling advertisement carefully.**

**Candidates must follow the following Steps while applying online Application Form.**

### **Step 1: Apply for Rolling Advt. (Ph.D.)**

- a) Register
- b) Login
- c) Apply online.
- d) Finalize Application Form
- e) Pay fee online using option "Proceed for Payment"
- f) Download Application Form (Take a print out of the entire file on A4 size white sheets)

**Note: The fee will not be accepted through any other mode.**

**Step 2:** Paste your recent photograph (3.5 cm X 3.5 cm) at the designated place and sign at the designated place.

**Step 3: Post/Submission:** Before sending your application form, make sure that, in addition to the above other relevant documents as indicated below are attached:

- NET Result/ fellowship award letter
- Copies of all the marksheets, degree certificates, or provisional certificate if they have passed their qualifying degree.
- Copy of OBC/SC/ST/PD category certificate if any)

Duly filled-in Application form with appropriate enclosures must be sent to The Respective Department/centre, Indian Institute of Technology Roorkee, Roorkee-247667, Uttarakhand

## APPLICATION PROCESS

For admission to Ph.D. programmes through rolling advertisement, candidates need to download the application and send it to the Head of the concerned department/centre. The department/centre will send a call for the interview on an appropriate date. The selected candidates will be registered for PhD as per institute rule. Selected candidates will start working as JRF under the assigned faculty member (PhD Thesis supervisor) from the date of selection in the admitting Department.

If the candidate is applying for more than one department/centre, separate applications should be submitted for each department /Centre.

The selection procedure will remain the same as adopted for admission with institute assistantship. The selection board will consist of all faculty members.

The maximum limit of PhD candidates for individual faculty will remain the same as in force as per PhD ordinances and regulations.

## 7. GENERAL INSTRUCTIONS

- (i) Students shall be governed by ordinance/ regulations in vogue.
- (ii) The Institute has the right to cancel, at any stage, the admission for the candidate who is found admitted to a course to which he/she is not entitled, being unqualified or ineligible in accordance with the statues and regulations in force.**
- (iii) Disputes if any, arising out of or relating to any matter whatsoever, concerning the aforesaid shall be subject to the exclusive jurisdiction of Roorkee Court.

Application should be submitted to the respective department/centre where the candidate seeks admission:

**To,**

**Head of the Department/Centre : .....**

**Indian Institute of Technology Roorkee**

**Roorkee-247 667, Haridwar, Uttarakhand**