



**संस्थापनसेवाएं (भर्ती)/Establishment Services (Recruitment)**  
**भारतीय प्रौद्योगिकी संस्थान रुड़की/Indian Institute of Technology Roorkee**  
**रुड़की /Roorkee 247667 (उत्तराखंड/Uttarakhand)**  
**Tel :01332- 284563**

**ROLLING ADVERTISEMENT FOR ASSISTANT PROFESSOR POSITIONS**

IIT Roorkee invites applications from candidates with an outstanding track record for positions at the level of Assistant Professor in the following Departments/School/Centres:

1. **Architecture and Planning**
2. **Applied Mathematics and Scientific Computing**
3. **Biosciences and Bioengineering**
4. **Chemical Engineering**
5. **Chemistry**
6. **Civil Engineering**
7. **Computer Science and Engineering**
8. **Design**
9. **Earthquake Engineering**
10. **Earth Sciences**
11. **Electrical Engineering**
12. **Electronics and Communication Engineering**
13. **Humanities and Social Sciences**
14. **Hydrology**
15. **Hydro and Renewable Energy**
16. **Management Studies**
17. **Mathematics**
18. **Mechanical and Industrial Engineering**
19. **Metallurgical and Materials Engineering**
20. **Paper Technology**
21. **Polymer and Process Engineering**
22. **Physics**
23. **Water Resources Development and Management**
24. **Mehta Family School of Data Science and Artificial Intelligence**
25. **Centre of Excellence in Disaster Mitigation and Management**
26. **Centre for Nanotechnology**
27. **Centre for Transportation systems**
28. **Institute Instrumentation Centre**
29. **International Centre of Excellence for Dams**
30. **Centre for Indian Knowledge System**
31. **Centre for Sustainable Energy**

Recruitment policies for IITs, as stipulated by the Government of India from time to time, will be applicable.

There is no last date for applying for Assistant Professor positions and **applications are welcome throughout the year.**

## Designations and pay structures are as follows:

- (i) **Assistant Professor Grade-I:** Academic Pay Level-12 (Rs.1,01,500 – 1,67,400).

For direct recruits, minimum pay in Academic Pay Level -12 to be fixed at Cell No.1 Rs.1,01,500. On completion of 3 years service as Assistant Professor Grade-I, the incumbent shall move to Academic Pay Level 13A1 (Rs.1,31,400-2,04,700).

- (ii) **Assistant Professor Grade-II:** Academic Pay Level-10 (Rs. 57,700 – 98,200).

The minimum starting pay to be fixed in Academic Pay Level-10 at Cell No.16 Rs. 89,800. On completion of one year service, the incumbent shall move to Academic Pay Level-11 and after completion of three years shall move to Academic Pay Level-12.

## Qualifications & Experience:

1. **Assistant Professor Grade-I:** Ph.D. with first class or equivalent at the preceding degree in an appropriate branch with a very good academic record throughout and a minimum of 3 years industrial/research/teaching experience, excluding the experience gained while pursuing Ph.D.
2. **Assistant Professor Grade-II:** Ph.D. with first class or equivalent at the preceding degree in an appropriate branch with a very good academic record throughout.
3. Specific areas of required specialization for Departments/Centres/School: [View](#)

## General Notes: -

- i. A candidate can apply to more than one Department/School/Centre.
- ii. The candidates should ensure that all the relevant information and documents have been uploaded before finalizing the application. After submission of the application, the candidate should keep a copy of it for his/her record. **No hard copy of the application needs to be submitted.**
- iii. Applicants called for interview will be reimbursed to and fro travel expenses within India. However, the Economy Class Air Fare tickets should be purchased through authorized agents (IRCTC, BLCL, ATT). Accommodation will be provided in one of the guest houses of the Institute.
- iv. It is the responsibility of the applicant to keep his/her current employer informed about his/her application to IIT Roorkee.
- v. Mere fulfillment of the qualifications & experience does not entitle a candidate to be called for interview.
- vi. The selected persons may be posted at any of the campuses of the Indian Institute of Technology Roorkee as per the requirements of the Institute from time to time.
- vii. The minimum requirement of qualification and/or experience may be relaxed in respect of outstanding candidate.
- viii. IIT Roorkee is committed to nurture and promote diversity and inclusion. Therefore, meritorious and eligible individuals belonging to under-represented groups, with very good academic record, are strongly encouraged to apply.

To apply please click the link: [Apply online](#)

For any queries, please contact: E-mail: [facultyrecruitment@iitr.ac.in](mailto:facultyrecruitment@iitr.ac.in)



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**SPECIAL DRIVE FOR RECRUITMENT OF SC/ST/OBC/EWS/PD CANDIDATES TO  
FACULTY POSITIONS**

**Advt. No. IITR/FR-SRD/2024/06**

**July 22, 2024**

Indian Institute of Technology Roorkee invites applications from SC, ST, OBC, EWS, and PD candidates with an outstanding track record for positions at the level of Assistant Professor in the following Departments/School/Centres:

1. **Architecture and Planning**
2. **Applied Mathematics and Scientific Computing**
3. **Biosciences and Bioengineering**
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5. **Chemistry**
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7. **Computer Science and Engineering**
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23. **Water Resources Development and Management**
24. **Mehta Family School of Data Science and Artificial Intelligence**
25. **Centre of Excellence in Disaster Mitigation and Management**
26. **Centre for Nanotechnology**
27. **Centre for Transportation systems**
28. **International Centre of Excellence for Dams**
29. **Centre for Indian Knowledge Systems**

Recruitment policies for IITs, as stipulated by the Government of India from time to time, will be applicable.

Last date for applying for Assistant Professor positions under Special Recruitment Drive is **September 17, 2024 till 05:00 PM.**

**Designations and pay structures are as follows:**

- (i) **Assistant Professor Grade-I:** Academic Pay Level-12 (Rs.1,01,500 – 1,67,400).
- (ii) **Assistant Professor Grade-II:** Academic Pay Level-10 (Rs. 57,700 – 98,200)  
The minimum starting pay to be fixed in Academic Pay Level-10 at Cell No.16  
Rs. 89,800

**Qualifications & Experience:**

1. **Assistant Professor Grade-I:** Ph.D. with first class or equivalent at the preceding degree in an appropriate branch with a very good academic record throughout and a minimum of 3 years industrial/ research/ teaching experience, excluding the experience gained while pursuing Ph.D.
2. **Assistant Professor Grade-II:** Ph.D. with first class or equivalent at the preceding degree in an appropriate branch with a very good academic record throughout.
3. Broad research areas, essential qualifications and other details for the Centre of Excellence in Disaster Mitigation & Management, Centre for Nanotechnology, Centre for Transportation Systems, International Centre of Excellence for Dams, Centre for Indian Knowledge Systems are available in Annexure -I.

**General Notes: -**

- (i) An applicant can apply to more than one Department/School/Centre.
- (ii) Applicants should ensure that all the relevant information and documents have been uploaded, including valid SC/ST/OBC/EWS/PD Certificate issued by the Competent Authority in the prescribed format before submitting the final application. After submission of the application, the candidate should keep a copy of it for his/her record. **No hard copy of the application needs to be submitted.**
- (iii) Applicants called for interview will be reimbursed to and fro travel expenses within India. However, the Economy Class Air Fare tickets should be purchased through authorized agents (IRCTC, BLCL, ATT). Accommodation will be provided in one of the guest houses of the Institute.
- (iv) It is the responsibility of the applicant to keep his/her current employer informed about his/her application to IIT Roorkee.
- (v) Mere fulfillment of the above-mentioned qualifications & experience does not entitle an applicant to be called for interview.
- (vi) The selected persons may be posted at any of the campuses of the Indian Institute of Technology Roorkee as per the requirements of the Institute from time to time.
- (vii) IIT Roorkee is committed to nurture and promote diversity and inclusion. Therefore, meritorious and eligible individuals belonging to under-represented groups, with very good academic record, are strongly encouraged to apply.

To apply please click the link: [Apply online](#)

For any queries, please contact: E-mail: [facultyrecruitment@iitr.ac.in](mailto:facultyrecruitment@iitr.ac.in)

## **Other benefits for professional advancement:**

1. In addition to the pay and allowances, all faculty members joining IIT Roorkee as an Assistant Professor on a regular position, or initially on contract with the provision of becoming regular, are paid a Fellowship of ₹ 30,000.00 per month for a period of 3 years.
2. Traveling Allowance on joining: Travel expenses for joining and shifting of personal household will be reimbursed up to ₹ 1 Lakh, if you are currently working in an organization in India, and up to ₹1.5 Lakh, if you are currently working in an organization abroad.
3. Residential Accommodation: An employee of the Institute is allotted an unfurnished house within the campus of the Institute, if available, subject to such conditions as may be laid down by the Board from time to time.
4. A faculty member is entitled to Professional Development Allowance @ ₹ 3 Lakhs for 3 years as per rules.
5. A grant of up to ₹ 20 Lakhs is available as Faculty Initiation Grant for a period of 3 years, upon the submission of a research proposal. An additional grant of up to ₹ 2 Lakhs can be availed for the purpose of procuring laptop, printer etc. at the time of joining.
6. The Institute promotes faculty engagement with industry, as well as with other research and professional institutions, to collaborate on research projects and provide consultancy services.
7. Medical Attendance and Treatment: Faculty members will be entitled to medical attendance and treatment including reimbursement of medical expenses incurred by you on yourself and your family as provided for in the Statutes/Medical Attendance Rules.
8. Children Education Allowance: Faculty members will be entitled to Children Education Allowance as per rules.
9. Faculty members are entitled to LTC as per rules.
10. The IIT Roorkee campus is a picturesque blend of historic charm and modern elegance, spread across lush green landscapes. Majestic colonial-era buildings stand in harmony with contemporary architecture, reflecting the institute's rich heritage and forward-looking vision. The places around IIT Roorkee boasts a variety of attractions such as Haridwar and Rishikesh, ranging from historical sites to natural beauty.

**Eligibility Criteria for CoEDMM for Assistant Professor**

**Essential Qualifications :**

A Master's degree with first class (or an equivalent grade in a point-scale wherever the grading system is followed). Ph.D. degree from science/ engineering/ social science/ professional discipline with an orientation to Disaster Risk Management.

Post Ph.D. Teaching/ Research/ Industry experience minimum of 3 years in any specialized area of relevant to CoEDMM with well-recognized organizations/ funding agencies of international/ national repute.

**Thrust Areas for CoEDMM**

Broad Research Areas	Sub-research areas
1. Risk Assessment & Communication	Hazard Assessment Vulnerability Coping capacity Multi-hazard Risk Assessment Risk Communication –Advanced Warning System
2. Modelling and Simulation	Atmospheric Science Climate Change Cyclone Drought Earthquake Fire Flood Geo-Informatics Geology Geophysical Geotechnical Heat Island Landslide Tsunami
3. Emergency Supply Chain Management	Relief Logistics Web Mapping GIS for Emergency Response
4. Decision Support System for Risk Reduction	Artificial Intelligence Big-data Analysis Computer Vision (Machine Learning) Geo-Intelligence IoT and Cyber Physical Systems Social Area Network
5. Disaster Management Plan preparation	Rehabilitation Risk Resilient Planning at various levels District/ State Disaster Management Plan

6. Mobilising Fund and other Support	Corporate Social Responsibility Risk Insurance Role of International/ national Organization for risk reduction/ management
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All the candidates are expected to be well-versed in the usage of latest pedagogical techniques to ensure the outcomes of the education imparted are aligned well with the Objectives of the Centre.

### Eligibility Criteria for Center for Nano Technology for Assistant Professor

#### Essential Qualifications :

- i) Master's degree with first class (or an equivalent grade in a point-scale wherever the grading system is followed).
- ii) Ph.D. degree in Physics/ Chemistry/ Nanotechnology/ Electronics Engineering/ Biotechnology/ Metallurgical and Materials Engineering/ Materials Science & Engineering/ Mechanical Engineering, with an orientation in Nano science and Nanotechnology.
- iii) Post Ph.D. multidisciplinary research/teaching/industry experience of minimum 3 years with well documented research publications and/or Patents in the broader domain of nano device fabrication.
- iv) If the Ph.D. research is not oriented to Nano science and Nanotechnology, then Post-Ph.D. teaching/ research/ industry experience requirement shall be of minimum 3 years.

#### Thrust Areas for Centre for Nanotechnology

Broad Research Area	Sub-Research Area	New faculty requirement: emphasis on specific skills
1. Nanobiotechnology	Drug delivery; tissue engineering; sensing and cellular imaging; anti-microbial agents.	Sensors and Actuator for biological systems-optical and electrochemical systems; Nanoscale fabrication technologies
2. Nanotechnology for Energy Conversion and Storage	Batteries; supercapacitors; solar photovoltaics; fuel cells; hydrogen production and storage.	Energy conversion and storage technologies.
3. Environmental Nanotechnology	Sensing of toxic gases, heavy metals and chemicals; photocatalytic degradation; nanoadsorbents.	Sensors and Actuator for environmental hazards -optical and electrochemical systems.
4. Quantum Technologies	Low-dimensional materials; Quantum computing; Quantum metrology; optoelectronics; nanoelectronics.	Quantum computing; Quantum metrology; Quantum/Nanophotonics; Nanoelectronics; nanoscale fabrication technology.
5. Nanomaterials for defence applications	Stealth application; Remote Sensing; THz technology.	Night vision technology; THz Emitters; Sensors & Detectors; Remote sensing.

**Eligibility Criteria for CTRANS for Assistant Professor**

**Essential Qualifications :**

- (i) Master's degree in Engineering / Science / Social Science / Management / Architecture, with first class (or an equivalent grade in a point-scale wherever the grading system is followed).
- (ii) Ph.D. degree in Engineering / Science / Social Science / Management / Architecture, with an orientation in Transportation Systems.
- (iii) Post Ph.D. research/ teaching/industry experience of Minimum 3 years in any thrust area of Transportation Systems in well recognized organizations / funding agencies of international / national repute with well documented research publication and/ or Patent in the broader domain of Transportation Systems with an interdisciplinary approach
- (iv) If the PhD research is not oriented to Transportation Systems, then Post-Ph.D. Teaching/ Research/ Industry experience requirement shall be of minimum 3 years.

**Thrust areas of Research for CTRANS**

	<b>Broad Research Area</b>	<b>Sub - Areas of Research</b>	<b>Participating Department</b>
1.	<b>Transport Policy (TP)</b>	Urban Transportation Policy & Research, Optimization of Public Transport Operation, Economic Appraisal of Transportation System, Legal aspects / Regulatory aspects, Multiplier Effect of Transportation Studies System for Urban & Rural Development, Public Transportation System Including Inter Modal Transportation, Inland Water Transport, Transportation Planning	Civil/HSS/Architecture & Planning / Chemical Engg./ Mathematics/MIED / Management / WRDM / Architecture
2.	<b>Information and Communication Technologies (ICT)</b>	Remote Sensing GPS and GIS Applications in Transportation System, Information Technology with focus on mobile adhoc networks, wireless sensor networks and data communication for Transportation Systems	Civil Engg./Earth Sciences / Electronics & Computer Engg.

3.	<b>Transport Design (TD)</b>	Design for Aesthetic & Comfort Ergonomics, Barrier free Environment	Civil/Architecture & Planning /MIED/Chemical Engg.
4.	<b>Management of Transport System (MTS)</b>	Management of Transport System Including Project Management, Technology Management, Business Process Reengineering, Knowledge Management, Manpower Planning, Human Re-engineering Value Engineering, Traffic Management, Behavioral Sciences, Logistics and Supply Chain Management	MIED/ Management Studies / Civil/Mathematics/HSS
5.	<b>Environment, Health and Safety (EHS)</b>	Environmental Analysis of Transportation Systems, and Health Hazards and Mitigation measures, Environment friendly alternate fuels, Accident Modeling and Road Safety	Civil/Chemical Engg./Chemistry / Mathematics/ MIED/Electrical/Electronics/ Computer Engg.

## **International Centre of Excellence for Dams**

- i. Seismology
  - ii. Seismic analysis
  - iii. Reservoir sedimentation, slit management
  - iv. River Engineering, reservoir operation, dam designs, design of hydraulic structures, Dam break modelling, flood estimation and forecasting, emergency action plan preparation
  - v. Hydro-mechanical applications in Dams and barrages – design of gates and hydraulic & pneumatic components.
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## **Centre for Indian Knowledge Systems**

- (a) Wellness from Indian perspective (Indic mind and sciences, Psychology and Cognitive Sciences, Indian medicine and health)
- (b) Physical mathematical and engineering sciences from Indic perspective (Indian Chemistry / EarthSciences/Geography/Metallurgical and material Science, Indian Physics and Astronomy, Indic traditions of water conservation and environment, Indian philosophy and practices in Agriculture and industry, Indic traditions of Architecture, Design and Planning)
- (c) Humanities, Arts, management and social sciences from Indic perspective (Indian philosophy /darshana, Indian arts, music and crafts, Indian lexicography and Manuscriptology, Indian social sciences, management and governance, Indian linguistics, Indian archaeology)