

**INDIAN INSTITUTE OF TECHNOLOGY DELHI**  
**HAUZ KHAS, NEW DELHI-110016**

**ROLLING ADVERTISEMENT FOR THE POST OF  
ASSISTANT PROFESSOR**

**Rolling Advertisement No. IITD/2023/AP-1**

IIT Delhi invites applications from well qualified Ph. D Degree holders<sup>1</sup> for the following faculty position at the level of **Assistant Professor** in its various Academic Units.

**This is a rolling advertisement. There is no last date.**

<b><u>POST</u></b>	<b><u>PAY LEVEL (as per 7<sup>th</sup> CPC)</u></b>
<b>Assistant Professor (Grade I)</b>	<b>Pay Level 12 (Rs.1,01,500-1,67,400)</b> with minimum Pay of Rs.101500/-. After completion of 3 years of service as Assistant Professor in Pay Level 12, the candidates will be considered for movement to Pay Level 13A1 (Rs.1,31,400-2,04,700)

- *HRA and other allowances will be as per the Central Government Rules.*
- *Age: Preferably below 35 years (for Male) and 38 years (for Female).*
- *Age relaxation for reserved candidates as per Govt. of India guidelines as follows: SC/ST - 5 years, OBC-NCL - 3 years, EWS - No age relaxation, General PwD - 10 years.*
- *Institute specifically encourages applicants from SC/ST/OBC/ EWS category as well as persons with disability.*

**MINIMUM QUALIFICATION AND EXPERIENCE FOR POSITION OF:-**

**ASSISTANT PROFESSOR (Grade I) :-**

Ph.D. and First class or equivalent grade at the preceding degree in an appropriate branch/discipline with a good academic record throughout. A minimum of three years teaching/ research / professional experience, excluding the experience gained before and while pursuing Ph.D. Candidate should have demonstrated research capabilities in terms of publications in reputed journals and conferences.

**Candidates with Ph.D but with less than 3 years experience can be considered for Assistant Professor (Grade II).**

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<sup>1</sup> Foreign Nationals will be on 5 years renewable contract basis, and have to obtain work visa from Government of India.

**The areas below mentioned against each Academic Units are only indicative and not exhaustive. The Institute is open to receiving applications from outstanding candidates with specialization in these and other related areas.**

## **ACADEMIC UNITS: -**

1. **CIVIL ENGG:** **Environmental:** Water and Wastewater Engg., Air Pollution Control Engg., Solid and Hazardous Waste Engg., **Geotechnical:** Geotechnical Engg., Geo- environmental Engg., Rock Mechanics, Rock Engg., **Structures:** Structural Engg., Construction Materials, Construction Management, **Transportation:** Transportation and Traffic Planning, Transportation and Traffic Engg., Pavement Engg., **Water Resources:** Water Resources Engg. and related Areas. **NOTE:** *The candidate should have B.E./B.Tech. or equivalent degree in Engineering with Ph.D. in the relevant area.*
2. **DESIGN:** We are looking for Candidates Specializing in all areas of Design including Industrial Design, Communication Design, Interaction Design, and other relevant design domains. Candidates should have an educational background in design.
3. **ELECTRICAL ENGG:** In all areas of Electrical Engineering including Electronics & Circuits, Control & Automation, Communication, Computer Engineering, Power Systems, Power Electronics, Machines & Drives.
4. **ENERGY SCIENCE & ENGINEERING:** Photovoltaic Devices and Modules, Energy Storage, Electrical Power Systems, Thermodynamics, Fluid Mechanics, Heat Transfer, and Combustion pertaining to Energy Systems, Intelligent Energy Systems.
5. **MATERIAL SCIENCE AND ENGINEERING:** Electron microscopy, functional and structural ceramics, Materials for renewable and sustainable technology, process modeling, nuclear materials and irradiation, semiconductor processing, crystal growth and epitaxy, thermodynamic modeling of materials, atomistic and coarse grain modeling on metals and functional materials, polymer rheology and processing, materials degradation and corrosion.
6. **ATMOSPHERIC SCIENCES (CAS):** All areas of Atmospheric and Ocean sciences, candidates with expertise in atmospheric observation are particularly encouraged to apply. More details about CAS are available here: <https://cas.iitd.ac.in/>.
7. **SENSORS, INSTRUMENTATION AND CYBER-PHYSICAL SYSTEM ENGINEERING (SeNSE):** Candidates must have a strong academic and research background, an ability to build world-class research facilities, and a proven/ demonstrated history of hands-on product and prototype development at the individual/ team level/ demonstrated history of original contributions in terms of high quality publications, patents or product development activities in the following areas- **Mixed signal ICs and circuits, Electronic circuit design (analog and digital), VLSI Design, Sensors, Sensors Systems, Signal Processing, Image Processing, Smart Systems, Cyber-physical systems, Communications for sensors/ sensors systems, Robotics/ Mechatronics/ Control Systems** (more details in encl. 1 at

8. **APPLIED MECHANICS:** Solid mechanics, Fluid mechanics, Design engineering and interdisciplinary areas of mechanics including but not restricted to Biomechanics, Nanomechanics, Multifunctional materials and structures, Structural health monitoring, Soft robotics, Machine learning in mechanics, Two-phase flows, Environmental fluid flows, Granular flows, Solid-fluid interactions, Naval Architecture, etc.
9. **BIOCHEMICAL ENGG. & BIOTECHNOLOGY (DBEB):** DBEB is an interdisciplinary department open to both scientists (biologists, chemists, physicists) and engineers (chemical, biochemical). We are particularly interested in candidates engaged in the rational development of processes for production of biochemicals using microbial, mammalian and plant cell cultures. We are equally interested in candidates involved in the development of enabling tools or technologies for the above processes such as metabolic engineering, synthetic biology, computational biology and systems biology.
10. **CHEMICAL ENGG:** All areas of Chemical Engineering, the candidate should have undergraduate education in chemical or allied engineering disciplines.
11. **COMPUTER SCIENCE & ENGG:** Priority areas for hiring are quantum computing, computational and systems biology, security and cryptography, autonomous intelligent systems, scientific computing, architecture and design automation, embedded and cyber-physical systems, parallel and distributed computing and systems, networks, data bases and data analytics, and collaborative computing. Outstanding candidates in other areas of computer science will also be considered. Candidates with an interdisciplinary or applied research focus are expected to demonstrate a strong research profile in core computer science areas.
12. **HUMANITIES & SOCIAL SCIENCES:** **Economics:** Microeconomics, Macroeconomics, international trade and public finance. **Linguistics:** Semantics, Phonology, Morphology, Syntax, Language Acquisition, Computational linguistics, Psycholinguistics, Neurolinguistics. **Philosophy:** All sub-disciplines of philosophy, with a special focus on the following areas: ethics, metaphysics, history of philosophy, political philosophy, philosophy of law, logic, epistemology, philosophy of mind, environmental philosophy, feminist philosophy, philosophy of culture, philosophy of religion, philosophy of technology, and philosophy of science. Applications are especially welcome from philosophers with access to philosophical texts in non-English languages, and who belong to diverse traditions of philosophy in different parts of the world. **Psychology:** Social Psychology, Positive Psychology, Cognitive Psychology, Neuropsychology, Computational Psychology. Exceptional candidates in other specializations may also apply.
13. **MANAGEMENT STUDIES:** Operations & Supply Chain Management, Marketing Management, Strategic Management, Technology Management, Telecom

14. **MATHEMATICS**: Probability, Statistics, Optimization, Scientific Computing, Theoretical Computer Science and Machine Learning and Data Science.
  
15. **MECHANICAL ENGG**: “All areas of Design and Production and Industrial Engineering. Further, applicants having strong fundamentals pertaining to thermodynamics, fluid mechanics, heat and mass transfer, combustion and gasification and numerical and experimental techniques may apply. It is desirable that the research interests should relate to one or more of the following application areas:
  - Sustainable Energy, clean energy and Transportation motive power
  - Thermo-fluid analysis of Biological Systems
  - Micro and nano-scale heat transfer
  - Thermal engineering of processesApplicants in the areas of Production and Industrial Engineering specializations are specially encouraged to apply”.
  
16. **PHYSICS**: Quantum Materials and Technology, Quantum Information Systems, Applied Optics, Optoelectronics, Quantum Photonics, Atomic and Molecular Physics, Plasma Physics with emphasis on interdisciplinary research, Astrophysics, Experimental High Energy Physics, Experimental and Theoretical Condensed Matter Physics (including Soft Matter and Statistical Physics).
  
17. **TEXTILE & FIBRE ENGINEERING**: Textile Engineering, Textile Technology, Textile Chemistry, Fibre Science & Technology, and other Engineering and Science (such as Civil, Mechanical, Chemical, Electrical/Electronics, Materials, Polymers, Mathematics, Physics, Chemistry, Bio-Sciences and Management) with demonstrated research experience in areas relevant to textiles and fibres.
  
18. **APPLIED RESEARCH IN ELECTRONICS (CARE)**: **Microwaves and RF**: RFIC and RFMEMS, Imaging and Surveillance, RF Digital Co-design, Active and Reconfigurable Antennas and Arrays, High Power Solid-State Systems, Non-linear Modeling and Measurements, Components & Systems up to THz; **Microelectronics**: MEMS and Microsystems, Micro sensors development for defense and space applications, mm-wave and THZ electronic devices, Quantum Electronic devices for Quantum Information Technology; **Signal Processing**: Acoustic Signal Processing, Underwater and Air Acoustics, Speech and Audio Processing, Signal Processing for Communications, Sensor Array Signal Processing, Multi-sensor Data Fusion, Machine Learning for Signal Processing, Signal Processing for Internet-of-Things; **Multi-disciplinary**: Modern Radar Systems.
  
19. **AUTOMOTIVE RESEARCH AND TRIBOLOGY (CART)**: Power Electronics for EV applications, Battery management systems and other storage technologies for

EVs, EV charging infrastructure and smart charging solutions, Vehicular Telematics and Embedded system for EVs, Connected and Autonomous EVs, Vehicle dynamics and control.

20. **BIOMEDICAL ENGG (CBME): Bio Instrumentation;** Electrical Engineering, Electronics, Medical Sensors, **Biomechanics;** Medical Implants, Mechanical Engineering, Design Engineering, Production Engineering, Material Science & Engineering, **Bio Imaging;** Electrical, Electronics, Optical.
21. **RURAL DEVELOPMENT AND TECHNOLOGY (CRDT) :** Rural Resources, Energy systems & Infrastructure; Resilience & Climate Change; Disruptive Technologies; Engineering Design, Artisanal/Agricultural Tools & Crafts; Indian Knowledge system, Skill Development & Entrepreneurship; Water resource management, Sanitation & Soil Health; Microbial & Biomass Technologies; Food science & Nutrition, Food processing & Technology (All above areas in rural context) Preference will be given in these areas: Artisanal/Agricultural Tools & Crafts; Resilience & Climate Change; Water resource management & Food science & Nutrition.
22. **TRIP-Centre (Transportation Research and Injury Prevention Centre):** Invites applications from well qualified Ph.D. degree holders with a strong academic background for the posts of Assistant Professor/Associate Professor and Professor specializing in transport planning and traffic safety, Automotive safety, Impact biomechanics, sustainable transport safety; vehicular pollution, transport economics, transport geography (statistics/epidemiology with a focus on population and demographics. Applicants can seek joint appointments in suitable departments and center's at IITD. TRIP Centre is a new academic unit established in May, '21. The Centre promotes and facilitates collaborative research and technology development in transportation research and injury prevention field.
23. **OPTICS AND PHOTONICS CENTRE:** Optical Engineering, Optical Instrumentation and Metrology, Optical Imaging, Fiber Optics, Integrated Optics, Optical Communication, Optical Sensors, Laser Science and Technology, Ultrafast Optics, Silicon Photonics, Nanophotonics, Plasmonics, Biophotonics, Green Photonics, Statistical and Quantum Optics, Quantum Photonics, Terahertz Photonics, Optical Metamaterials, Nonlinear Optics, Optical and Magneto-optical Storage Devices, Photonic Devices, and other relevant areas.
24. **BHARTI SCHOOL OF TELECOMMUNICATION TECHNOLOGY AND MANAGEMENT (BSTTM):** All areas of Telecom Technology and Management.
25. **AMAR NATH & SHASHI KHOSLA SCHOOL OF INFORMATION TECHNOLOGY (ANSKSIT):** Computational Neuroscience, Medical Applications of Information

26. **SCHOOL OF PUBLIC POLICY (SOPP)**: ((i) **Agriculture, Food and Water**: Social, institutional and policy processes utilizing technological interventions or affecting technological change in the agriculture, food and water sectors for economic development, environmental sustainability and public health; (ii) **Energy and Environment**: Governance of socio-technical transitions in the energy sector, and associated issues related to the role of technology in addressing climate change adaptation and mitigation and other sustainable development challenges, air quality management, energy access, energy security and institutional reform in the energy sector; (iii) **Internet, Digital Information and Society**: Data science in public policy, automation and the labour market, AI and ethics, algorithmic bias, methodological innovations in causal inference and impact assessment, internet/social media and policy, digital information and privacy, voting technologies; (iv) **Innovation Systems and Processes**: Role of policies in strengthening actors, networks and institutions (and vice versa) to enhance the direction and pace of technological change, i.e. the invention, innovation and diffusion of new technologies to address key societal challenges; (v) **Industry and Economy**: Technological capabilities of India's industrial enterprises ranging from large, established firms to startups, developing policies to enhance these capabilities and directing them to better engage with India's developmental challenges; (vi) **Sustainable Habitats**: Policy questions related to affordable housing, transportation and mobility, land use and zoning, gender and inclusion, urban governance and institutions, informality and the informal sector, role of ICTs and other technologies in urban development, and smart cities; (vii) **Technical Higher Education**: Patterns of research and educational performance of technical higher education institutions and developing policies to strengthen these institutions; understanding issues relating to broadening participation in S&T-relevant education and training, especially marginalized groups/communities.
27. **YARDI SCHOOL OF ARTIFICIAL INTELLIGENCE (ScAI)** : In all areas of artificial intelligence, Subareas of interest include (but are not limited to) deep learning, reinforcement learning, probabilistic models, data mining, information retrieval, multi-agent systems, knowledge representation and reasoning, mathematical foundations of AI, ethics of AI, applied AI such as NLP, computer vision, robotics, AI on the edge, etc., and applications of AI to domain areas such as healthcare, agriculture, education, industry 4.0, etc. ScAI strongly encourages applicants with demonstrated track-record of working at the intersection of an application area and the AI fields.
28. **COMPUTER SERVICES CENTRE**: System Architect.

**The following benefits are applicable for the post of Assistant Professor:-**

- A start-up seed grant of up to ₹ 20,00,000/- is available to develop research capability in the area of expertise of the faculty member to set research goals for oneself. The Institute also provides an additional grant of ₹ 30,00,000/- as matching equipment grant to build new capability / high-value research facility in emerging

areas via special project funding from external agencies. These grants are to be availed within 3 years of joining. The strategic goal of this fund is to aim for bigger projects.

- A cumulative Professional Development Allowance (**PDA**) of ₹ 3,00,000/- for every block period of 3 years is available to every member of the faculty to meet the expenses for participating in conferences, membership fee of various professional bodies, procurement of books and periodicals and contingent expenses.
- Reimbursement of telephone/mobile bills up to a ceiling of ₹ 2,250/- plus taxes and ₹ 1,200/- plus taxes as applicable per month for faculty members in pay levels 12/13/13(A) and 11, respectively.
- Relocation allowance, as a reimbursement of expenses incurred by a faculty member on travel by him/her and his/her family and for transportation of household goods, limited to ₹ 2,50,000/- for faculty joining the Institute from abroad and ₹1,25,000/- for faculty joining the Institute from India.
- Candidates for the post of Assistant Professor are eligible for “Young Faculty Incentive Fellowship”, initially for a period of 3 years from date of joining till the movement to Pay Level 13A1 whichever is earlier. The fellowship grants an honorarium of ₹ 25,000/- per month over and above the salary.
- Faculty are eligible for Chair Positions that entitle faculty members to a grant of ₹ 5,00,000 per annum for a period of 3 years, extendable up to 5 years.
- Institute bestows Faculty Research Awards to faculty members, across designations, in recognition of their significant research contributions.
- Other than above some more additional benefits and incentives are available in the institute. For further details, please see at [https://home.iitd.ac.in/uploads/Benefits\\_and\\_incentives\\_to\\_faculty.pdf](https://home.iitd.ac.in/uploads/Benefits_and_incentives_to_faculty.pdf)

#### **NOTES:**

- The policy of Govt. of India on reservation of faculty positions as applicable to IITs, including that for persons with disability, will apply.
- The minimum requirement of qualifications and/or experience may be relaxed in respect of exceptionally outstanding candidates in certain areas.
- A mere fulfillment of required minimum qualifications and experience does not entitle a candidate to be called for an interview/discussion.
- The Institute reserves the right to fill or not to fill the posts advertised.
- No correspondence whatsoever will be entertained from the candidates regarding postal delays, conduct and result of the interview, and reasons for not being called for interview or selection.
- Depending upon the qualification and experience, a higher starting salary may be offered to deserving candidates.
- Separate online applications must be filled in, if a candidate is applying for a faculty position in more than one academic unit (Department/Centre/School). Candidates having overlapping interests in more than one academic unit can be considered for joint appointment, if selected.
- The candidates called for interview will be paid AC2-Tier by Train / Economy Class by Air or actual expenditure and AC Taxi by road (from Airport/Railway Station/ISBT and back) fare from their place of residence/work and back by the

shortest route within India.

- Persons employed in Government/Semi-Government Organization or Educational Institutions must apply through proper channel OR shall provide “**No Objection Certificate**” while applying or at the time of interview.

**IIT Delhi makes every attempt to help faculty members settle in their academic role and to grow professionally.**

**ACCOMMODATION:** Suitable residential accommodations, located on the campus, shall be provided as per Institute rules to the faculty members on joining the Institute (this is subject to availability). Faculty members can avail accommodation outside the campus on lease till regular accommodation is provided in the campus. Institute supports payment of monthly rental of up to ₹ 35,000/- for the same.

**ABOUT THE CAMPUS:** Extending into an area of 320 acres, the campus is imaginatively laid out with a picturesque landscape with clean and wide roads. The campus provides all essential amenities for community living including Staff Club, Sports Complex (both indoor & outdoor), Hospital, Shopping Centre, Banks, ATMs, Post Office, numerous food courts, Community Centre, etc.

### **HOW TO APPLY:**

It is a requirement that candidates use the IIT Delhi website to fill-up and submit application online against the aforesaid faculty position. The website also contains useful information on various aspects of working and living at IIT Delhi and recruitment process.

As a precaution, after submitting the application through the website, please retain a copy of the application. Candidates employed with Government/Semi-Government Organizations or with Autonomous Bodies must print a copy of the electronic submission and submit the printed version through proper channel at the address given below.

Candidates who have applied online may please log in to our site <https://ecampus.iitd.ac.in/IITDFR-0/login> and check the status whether their applications have been received or not.

### **Address for Correspondence:**

**Faculty Recruitment Cell (E-I)  
Indian Institute of Technology Delhi,  
Hauz Khas, New Delhi-110016, INDIA  
Telephone: +91-11-2654-8733  
E-mail: [fac\\_recruit@admin.iitd.ac.in](mailto:fac_recruit@admin.iitd.ac.in)**

For any technical help, please contact through email to [eadminhelp@iitd.ac.in](mailto:eadminhelp@iitd.ac.in) or Ph. 011-26597220

**(Updated on 2<sup>nd</sup> January 2023)**