# Indian Institute of Engineering Science and Technology, Shibpur



# **ROLLING ADVERTISEMENT FOR FACULTY POSITIONS**

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Indian Institute of Engineering Science and Technology, Shibpur, an Institute of National Importance under the Ministry of Human Resource Development, Government of India requires faculty for its various academic units. The Institute invites application for faculty positions at the level of Assistant Professor, Associate Professor and Professor from Indian nationals, possessing excellent academic background, commitment to top quality teaching and proven credentials for carrying out outstanding research and development in various specializations for the following Departments:

SI.	Position	Pay Level (7 <sup>th</sup> CPC)
1	Assistant Professor Grade II	10
2	Assistant Professor Grade II	11
3	Assistant Professor Grade I	12
4	Associate Professor	13A2
5	Professor	14A

### Engineering :

# (i) Architecture, Town and Regional Planning

**Specialization:** Architectural Conservation, Communication Design, Environmental Planning, Housing, Industrial Design, Infrastructure Planning, Landscape Architecture, and Urban Design.

The candidate must have a degree in Bachelor of Architecture, AND, a degree in Master of Architecture/ its equivalent, OR Master of Planning/ its equivalent, OR Master of Design/ its equivalent, OR in a relevant discipline for Assistant Professor (on contract) AND, Ph.D. for higher cadre.

# (ii) Civil Engineering

**Specialization:** Structural Engineering, Geotechnical Engineering, Environmental Engineering, Transportation Engineering, Water Resources / Hydraulics Engineering, Construction Technology / Management, Geomatics Engineering, Earthquake Engineering.

The candidate must have B.E./ B. Tech./ M.E./ M. Tech. or equivalent degree in Civil Engineering or in a relevant discipline.

#### (iii) Computer Science and Technology

**Specialization:** Theoretical Computer Science/ Embedded Systems and Architecture/Data Analytics and Security/Computer Networks and Distributed Systems/IoT and Cloud Computing

The candidate must have B.E./ B. Tech./ M.E./ M. Tech./MS in Computer Science and Engineering/ Technology.

### (iv) Electrical Engineering

**Specialization:** Control System & Instrumentation, Power and Energy Systems, Power Electronics and Machine Drives.

The candidate must have B.E./ B. Tech. in Electrical Engineering, and M.E./ M. Tech. in above specializations or in a relevant discipline.

#### (v) Electronics and Telecommunication Engineering

**Specialization:** VLSI design and testing, Communication and Signal Processing, Electronic instrumentation and control.

The candidate must have B.E./ B. Tech./ M.E./ M. Tech. or equivalent degree in Electronics and Communication Engineering or in a relevant discipline.

#### (vi) Mechanical Engineering

Specialization: Thermal Engineering, Machine Design and Manufacturing science.

The candidate must have B.E. / B. Tech./ M.E./ M. Tech. in Mechanical Engineering or Production Engineering.

### (vii) Metallurgy and Materials Engineering

**Specialization:** 1. Extractive Metallurgy (with expertise in Iron making/Steel making/Non-ferrous extraction/ foundry), 2. Mechanical Metallurgy (with expertise in Fatigue/Fracture/Creep), 3. Computational Materials (with expertise in Ab-intio/Phase – Field/ Molecular Dynamic/ finite Element Simulation), 4. Surface Engineering (with expertise in Coating/Laser/Plasma/ Other surface modification techniques), 5. Advanced Materials (with expertise in Electronic/Magnetic/Energy Materials), 6. Ceramic/Polymeric Materials.

The candidate must have B.E./ B. Tech./ M.E./ M. Tech. or equivalent degree in Metallurgy and Materials Engineering or in a relevant discipline.

#### (viii) Mining Engineering

**Specialization:** Geomechanics, Opencast Mining, Mine Planning and Design, Mineral Processing, Mine Environment, Environmental Management, Geoinfromatics, or any other related field.

The candidate must have B.E./ B. Tech degree in Mining Engineering; AND/ OR M.E./ M. Tech degree in Mining Engineering or in a relevant discipline.

#### <u>Science</u>

# (i) Chemistry

**Specialization:** Organic Chemistry – Synthetic Organic Chemistry / Medicinal Chemistry / Bio-Organic Chemistry; Physical Chemistry – Experimental Polymer Chemistry / Experimental Biophysical Chemistry / Experimental Photochemistry / Experimental Surface Chemistry.

The candidate must have M.Sc. and Ph.D. in Organic Chemistry / Physical Chemistry or in a relevant discipline.

#### (ii) Earth Science

Specialization: Geophysics, Ore Geology / Economic Geology

The candidate must have B.Sc. (Hons) degree in Geology/ Applied Geology, M.Sc in Geology/ Applied Geology/ Geophysics or in a relevant discipline.

For Geophysics specialization B.Sc(Hons.) in Geophysics and M.Sc. in Geophysics may also apply.

(iii) Mathematics

**Specialization:** Financial Mathematics, Mathematical Analysis, Fuzzy Sets and Systems, Quantum Mechanics, Relativity and Cosmology, Non-linear Dynamics, Data Modeling and Forecasting.

The candidate must have B.Sc. (Hons) degree in Mathematics, M.Sc in Mathematics or in a relevant discipline.

(iv) Physics

**Specialization:** Condensed Matter Physics, Electronics, High Energy Physics, Nuclear Physics, Photonics.

The candidate must have B.Sc. (Hons) degree in Physics, M.Sc in Physics or in a relevant discipline.

### Humanities and Social Sciences

The candidates must have M.A. / M. Sc. in Economics, OR M.A./ M. Sc. in Applied Psychology with specialization in Clinical Psychology and Counselling.

# Interdisciplinary:

# (i) Aerospace Engineering and Applied Mechanics

# Assistant Professor and Associate Professor

**Bachelor Degree:** Aerospace Engineering/ Aeronautical Engineering/ Mechanical Engineering/ Civil Engineering **Masters level specializations**: Navigation, Guidance and Control/ Avionics /Propulsion/ Space dynamics/ Aerodynamics;

**Doctoral level specializations**: Navigation, Guidance and Control/ Avionics /Propulsion/ Space dynamics/ Aerodynamics (Direct Doctorate candidates with above mentioned specializations may also apply)

### For Professor

**Bachelor Degree:** Aerospace Engineering/ Aeronautical Engineering/ Mechanical Engineering/ Civil Engineering **Masters level specializations**: Fluid Mechanics/Hydraulics/ Applied Mechanics/ Aerodynamics/ Solid Mechanics/ Structural Engineering

**Doctoral level specializations**: Fluid Mechanics/Hydraulics/ Applied Mechanics/ Aerodynamics/ Solid Mechanics/ Structural Engineering

# (ii) Information Technology

**Specialization:** Software Engineering, High performance computing, Hardware and Architecture, Embedded systems, Algorithms, Data Base Management Systems, Computer Networks, Distributed computing, formal Language and Automata, Information Security, Machine learning and AI, Cloud Computing, Information and Signal Processing, Wireless Communication, Computer Vision and Image Analysis.

The candidate must have B.E./B.Tech./ M.E./M.Tech. in IT/ CST/ ECE or in a relevant discipline.

# NOTE:

- 1. All new entrants shall have Ph.D. in the relevant/ equivalent discipline, and shall have First Class in the preceding degrees. Candidates obtaining Ph.D directly after B.E./ B. Tech. are eligible to apply.
- 2. For faculty in the department of Architecture following will be essential qualification without insisting on credit point requirements at Assistant Professor level:

• M.Arch./ M.Plan./ M.Des. with 01 year professional experience : Assistant Professor Grade II at Level 10 (as per 7th CPC)

• M.Arch./ M.Plan./ M.Des. with 02 years of professional experience : Assistant Professor Grade II at Level 11 (as per 7<sup>th</sup> CPC)

• For higher cadres the Essential Qualification and credit point requirement will remain same as given in the table for Engineering and Sciences.

- 3. Reservation rules of the Government of India will be strictly followed.
- 4. This being an advertisement governed by the flexible faculty recruitment rules, the number of positions for internal candidates are not restricted by the number of vacant positions. However, the total number of faculty positions will not exceed the sanctioned positions of the Institute.
- 5. Relevant notifications issued from MHRD will be applicable. Relevant notifications published till the date of publication of the advertisement are to be found in the Recruitment Rules for Faculty recruitment and MHRD clarification on the recommendation of the Oversight committee.

- Number of vacancies in all or any of the categories (including reserved vacancies) may be increased / decreased without any notification. However, reservation rules of the Government of India will be strictly followed.
- 7. Based on the recommendation of the Selection Committee, the Institute may offer to a candidate a post less than that applied for.
- 8. The Institute reserves the right to modify / defer or cancel full / part of the advertisement/ recruitment at any stage of processing without assigning any reasons.
- 9. Specialization: The concerned Departments will shortlist the name(s) as per their requirement.
- 10. Internal faculty members with any specialization are eligible to apply.
- 11. Pension : Freshly recruited candidates shall be governed by the New Pension Scheme of the Govt. of India
- 12. Incentives at par with other CFTIs.

Designation and Pay Level (as per 7th CPC)	Essential Qualific ation	Essential Requirements	Cumulative Essential Credit Points
Assistant Professor Grade II at Level 10	PhD	NIL	NIL
Assistant Professor Grade II at Level 11	Ph.D	01 year post Ph.D. experience of Teaching and Research in Institution of repute / Industry	10
Assistant Professor Grade I at Level 12	PhD	03 years after Ph.D. or 06 years total teaching and research experience in reputed academic Institute / R&D Labs / relevant industry	20
Associate Professor at Level 13A2	PhD	<ul> <li>(6) years after Ph.D. of which at least 3 years at the level of Assistant Professor with AGP Rs.8000/- Or</li> <li>(9) years total working</li> <li>experience, of which 3 years should be after Ph.D., with at least 3 years at the level of Assistant Professor with AGP RS. 8000/-</li> </ul>	50
Professor at Level 14A	PhD	10 years after Ph.D. or 13 years total working experience, out of which 07 years should be after Ph.D. At least 03 years at the level of Associate professor with AGP of Rs.9500/- Or 04 years at the level of Associate Professor with AGP of Rs.9000/- or combination of Rs.9000/- and Rs.9500/- or equivalent in an Institution of repute / R&D lab or relevant industry.	80

# Minimum Qualifications and Experience for the Posts

# General Information

- □ Degrees referred above should have been awarded by a recognized University / Institute.
- □ Mere eligibility will not vest any right on any candidate for being called for interview. The decision of the Institute in all matters will be final. No correspondence will be entertained from the candidates in connection with the process of selection / interview.
- □ The Institute reserves the right to call for interview only those candidates shortlisted on the basis of their qualification, experience, research and publication records and departmental requirements etc.
- □ The Institute reserves the right to fill or not to fill any or all the posts advertised.
- □ Persons employed in Government Organizations / Quasi Government Organizations should submit their application through proper channel.
- □ Train fare (to & fro) will be paid as per Institute rules from residential address to IIEST, Shibpur by the shortest route for out station candidates only.
- □ On special request by a candidate selected for interview but staying abroad, an interview through Skype may be arranged.
- □ Canvassing in any manner may entail disqualification of the candidature.
- □ Any dispute with regard to the selection / recruitment process will be subject to Courts / Tribunals having jurisdiction over Kolkata.
- □ Candidates possessing requisite qualification and experience are required to apply in prescribed application form and Biodata Sheet (downloadable from the website www.iiests.ac.in ) and send to the Dean (Faculty Welfare) in the email address: recruitment\_faculty@iiests.ac.in.

**Application fee of Rs.1000/-** (Rupees one thousand only) may be sent to the Registrar, IIEST, Shibpur, Howrah-711103 through 'Fund Transfer' in favour of "IIEST, Shibpur" at Kolkata in the following bank account:

# IIEST, Shibpur, ↓ United Bank of India, IFSC Code : UTBI0BUSF63, A/c No. : 0171050031536

Candidates must mention the NEFT/RTGS Code along with the date of transfer in the specified place in the application form.

□ SC/ST candidates and internal faculty members are exempted from paying application fee.

Registrar