

INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY, SHIBPUR

PhD Admissions in January 2016

Applications are invited from Indian nationals for admission to PhD Program in the prescribed proforma ([for the form use this link](#)) for admission to the PhD programme in January cycle of the 2015-16 academic year. Application can be done for full-time mode (with or without scholarships) and for part-time mode (without scholarships). Twenty five Institute scholarships (as per MHRDs new revised scale) are available. Candidates enrolled after admission without scholarship may migrate from full time/or part time mode to full time with scholarship mode drawing their scholarships from the respective organizations (DST, CSIR etc.) if they are entitled for the same after enrollment.

Eligibility:

(a) To be eligible for enrollment in a Department/School/Centre belonging to the Faculty of Engineering and Technology or the Faculty of Basic and Applied Sciences, a person should have a Master's Degree in Engineering/Architecture/Town and Regional Planning/any branch of Science or any related branch of Science or Engineering or M.Phil or an equivalent Degree recognized by the U.G.C/A.I.C.T.E./ in a branch of Science or any related fields.

(b) In exceptional cases, the concerned faculty council** may allow enrollment to candidates with B.E/B.Tech Degree or equivalent. Such candidates will require undertaking additional course work in subjects covering not less than two semesters. However, the additional course work may be completed, if possible, in a single semester.

(c) For enrollment in a Department/School/Centre belonging to the Faculty of Social and Management Sciences, a person should have a Master's Degree in any branch of Humanities/Social Sciences/Management or any other related branch of study/M.Phil in any related branch of study or any equivalent Degree recognized by U.G.C/A.I.C.T.E.

In special cases the concerned Faculty Council may allow enrollment of a candidate possessing Master's Degree or equivalent in a branch of Science/Engineering in the Faculty of Social and Management Sciences.

(*Note that after conversion from Bengal Engineering and Science University, Shibpur to IEST, Shibpur the old administrative structure with separate Dean for each faculty council have been merged to form a single Senate with a single Dean (Academic). There are no other changes done).

Desirable: GATE/NET/SLET or equivalent qualification.

Age: For Institute scholarship: 32 years as on 1 July 2016; date may be relaxed for SC/ST/OBC/PWD/Woman candidate as per rules. No age bar for the part-time candidates. However, migration from without scholarship to with scholarship mode will not be allowed if age requirement is not complied.

Above eligibility is minimum requirement only. Good academic career and higher qualification is preferred and mere eligibility does not ensure a call for admission test and/or Interview. A screening of applications will be made to prepare a short list of candidates who will be called for admission test and/or Interview. Further screening will be done after the admission test to select the candidates for the interview.

The number of scholars to be enrolled (with and without scholarship) in a unit (Department/school/Centre) with Specializations in the proposed PhD Program is given below

Department / School / Centre	Name of the Supervisor(s)	Area of Specialization	No. of Scholar
Aerospace Engineering and Applied Mechanics	Prof. Rana Roy	Earthquake Engineering and Dynamic Soil-structure Interaction	1
	Prof. Nityananda Nandi	Hydraulic Structures	1
		Fluid Mechanics	2
	Prof. Prithwish Kumar Das	Earthquake Engineering and Structural Dynamics	1

	Prof. Niloy Khutia	Finite Element Analysis and Testing of Nanocomposite in Aerospace Engineering Application	1
		Constitutive modelling and Finite Element Analysis of Nuclear Piping Material	1
	Prof. Pabitra Haldar	Fluid Mechanics/ Aerodynamics/ Thermal Engineering	3
Architecture, Town and Regional Planning	Prof. Aditya Bandyopadhyay	Regional planning, City planning, resource Planning	3
	Prof. Souvanik Roy	Climate change adaptation in city planning, Space syntax in architecture /planning	1
	Prof. Arup Sarkar	Urban and regional planning, Remote sensing and GIS application	2
	Prof. Swati Saha	Urban and environmental planning, heritage conservation planning	2
	Prof. Partha Sarathi Mukhopadhyay	Disaster resistant architecture, urban design	1
	Prof. Subrata Kr. Paul	Urban / transportation planning	1
	Prof. Somen Mitra	Public transit system planning, environmental planning	2
Chemistry	Prof. S. P. Goswami	Molecular recognition and supramolecular chemistry, Organic Synthesis, Methodology and Bioorganic Chemistry	1
	Prof. J. Datta	Electrochemistry, Fuel Cells, Thin Film Liquid Junction Solar Cells	1
	Prof. B. Adhikary	Coordination Chemistry & Nanomaterials	1
	Prof. A. Mondal	Thin film semiconductor & solar cells	1
	Prof. S. K. Chattopadhyay	Coordination and Bioinorganic Chemistry	1
	Prof. P. K. Nandi	Computational and Theoretical Chemistry	1
	Prof. B. K. Ghorai	Synthetic Organic and Organometallic Chemistry, Molecular Design and Synthesis of Organic π -Conjugated Materials for Optoelectronic Applications.	1
	Prof. Sudip K. Chattopadhyay	Theoretical Molecular Sciences	1
	Prof. A. K. Mahapatra	Design, Synthesis & Molecular Recognition	1
	Prof. J. Ganguly	Carbohydrate Chemistry	1
	Prof. C. Bhattacharya	Electrochemistry, Photoelectrochemical Solar Cells, Conducting Polymers	1
	Prof. P. Biswas	Bio-coordination chemistry and nanomaterials	1
	Prof. N. D. Paul	Homogeneous catalysis and bio-inspired coordination chemistry	1

Civil Engineering	Prof. Kalyan K Chattopadhyay	Geotech. Engg: Soil Dynamics, Depp foundation	1
	Prof. Kalyan Kumar Bhar	Water Resources Engg: Systems Analysis, Flood Control, Stochastic Hydrology, Ground Water Modelling	1
	Prof. Subrata Chakraborty	Structural Engg: System Identification, vibration control, Reliability and Optimization, NDT Methods	1
	Prof. Ambarish Ghosh	Geotechnical Engg: Environmental Geotechnics, Ground Improvement, Soil Dynamics and Geotechnical Earthquake Engg.	1
	Prof. Aparna (Dey) Ghosh	Structural Engg : Vibration control of structures	1
	Prof. Ashis Kumar Bera	Geotechnical Engg: Reinforced Soil, Ground improvement Method, Foundation Engg	1
	Prof. Sujata Biswas	Water Resources Engg: Water Resource Engg., Remote Sensing and GDS, Watershed Management	1
	Prof. Tapash Kumar Roy	Transportation Engg: Pavements materials and waste management	1
	Prof. Soumya Bhattacharjya	Structural Engg : Optimization under Uncertainty, Metamodeling in Structural Engg	1
	Prof. Asok Adak	Environmental Engg : Effect of advanced oxidation of degradation of antibiotic resistance strains	1
	Prof. Sujit Kumar Dalui	Structural Engg : Wind Effect on Structures	1
	Prof. Pritam Saha	Transportation Engg: Pavement Engg	1
	Prof. Ujjal Saha	Water Resources Engg : Climate Change Impact on Water Resources. Urban Hydrology. Stochastic Rainfall Modeling, Rainfall-Runoff modeling	1
Computer Science and Technology	Prof. Abhik Mukherjee	Software Engineering	2
	Prof. Asit Kumar Das	Data Mining, Social Network and Evolutionary Algorithms	1
	Prof. Biplab K Sikdar	Computer Architecture, Futuristic Computing and Cellular Automata	2
	Prof. Sekhar Mandal	Image Processing and Pattern Recognition	1
Earth Science	Prof. T. K.Gangopadhyay	Invertebrate Palaeontology	1
	Prof. B. P. Mukhopadhyay	Sedimentary Petrology & Geochemistry	1
	Prof. Atin Kumar Mitra	Structural Geology	1
Electrical Engineering	Prof. Sukanya Parui	Nonlinear Phenomena in Power Electronic Circuits	1
	Prof. Gautam Bandyopadhyay	Use of Power electronics converters in Power Systems	1
	Prof. Paramita Chattopadhyay	Intelligent Thermal Monitoring of Electrical Equipment	1
		Application of Nano Fluids in Power	1

		Sector	
	Prof. Suvarun Dalapati	Probable Title of research work: Power Electronic Converter Topology, Control and Applications	1
	Prof. Mainak Sengupta	Switched reluctance machines and their Power electronic converters	1
	Prof. Debabrata Roy	Single-axis Controlled Horizontal- shaft Repulsive Type Magnetic Bearing	1
Electronics and Telecommunication Engineering	Prof. Susanta Kumar Parui	Antenna Engineering	1
	Prof. Baidyanath Ray	VLSI for high frequency signal and image processing	2
	Prof. Debashis Mitra	Design of small Antenna for biomedical application; Electromagnetic meta-materials for antenna application	2
Information Technology	Prof. Tuhina Samanta	Design and Analysis of algorithms for VLSI design, some performance studies	1
		Protocol design for QoS based wireless sensor networks	
Mathematics	Prof. Jagabandhu De	Fracture Mechanics	1
	Prof. Murari Mitra	Mathematical Theory of Relativity, Nonparametric Methods, Probability Models, Weak Convergence, Tests of Statistical Hypotheses	1
	Prof. Tapan Kr. Roy	Fuzzy Set Theory Related Topics	3
	Prof. Ashok Kr. Dhar	Non-linear Effect of Water Waves	1
	Prof. Tapan Kr. Kar	Mathematical Ecology	4
	Prof. Parbati Saha	Fuzzy Mathematical Systems	2
	Prof. Smita Pal (Sarkar)	Thermoelasticity	1
	Prof. Ujjal Debnath	Theory of Relativity and Cosmology	1
Mechanical Engineering	Prof. Bijan Kumar Mandal	Combustion and Bio-Fuels	1
	Prof. Santanu Kumar Karmakar	Tribology and Bio-Tribology	1
	Prof. Debasis Datta	Ultrasonic NDE, FEM based simulation	1
	Prof. Apurba Kishore Dutta	Metal Cutting	1
	Prof. Somnath Chakrabarti	Fluid Flow Analysis & Bio-Medical Engineering	1
	Prof. Achin Kumar Chowdhuri	Performance, Combustion and Emission Analysis of I.C. Engines	1
	Prof. Partha Pratim Dey	Fracture Mechanics	1
	Prof. Sudip Ghosh	Energy Technology and Renewable Energy	1
	Prof. Subash Chandra Mondal	Cutting Tool Material Development, Robust Manufacturing	1
	Prof. Aritra Ganguly	Solar Photo-voltaic System, Greenhouse Design	1
Metallurgy and Materials Engineering	Prof. Swarup Kumar Ghosh	Precipitation Strengthened Advanced High Strength Steel	1

	Prof. Subrata Chatterjee	Friction Stir Welding , High Strength Steel	1
	Prof. Amitava Basu Mallick	Nanostructured Magnetic Materials	1
	Prof. Debdulal Das	Metal Matrix Nanocomposite	1
	Prof. Sukumar Kundu	Joining of Dissimilar Materials, Electrochemical Study of Metallic Materials	1
Mining Engineering	Prof. Pratik Datta	Geomechanics	2
		Mine Planning	1
	Prof. Suranjan Sinha	Environmental Management in Mines	2
	Prof. Indranath Sinha	Environmental Management in Mines	1
	Prof. P. Paul	Geoinformatics	1
	Prof. N. C. Dey	Mining Machinery	1
	Prof. Gopal Roy	Mine Safety and Optimisation	1
Physics	Prof. Dipali Banerjee	Nanomaterials and their applications in Condensed matter Physics (Experiment)	1
	Prof. Sukhendusekhar Sarkar	Nuclear structure and Nuclear Astrophysics (Theory)	1
	Prof. Mousumi Basu	Fiber/waveguide optics in linear and nonlinear domain (Theory)	1
	Dr. Samar Jana	Rare earth Laser and Luminescent materials (Experiment)	2
	Dr. S. Minhaz Hossain	Low dimensional Silicon : Physics and Applications (Experiment)	2
	Dr. Abhijit Majumdar	Plasma Biomedical applications (Experiment)	3
	Dr. Manish Pal Chaudhury	Nanomaterials and Nanoelectronics (Experiment)	1
	Dr. Abhijit Bisoi	Spectroscopic study in A~ 40 region (Nuclear structure and Nuclear Astrophysics) (Experiment)	1
	Dr. Dwipesh Majumder	Fractional Quantum Hall effect/ Quantum computer (Theory).	1
School of Ecology, Infrastructure and Human Settlement Management	None in this cycle		
School of Materials Science and Engineering	Prof. S. Chatterjee	Semiconductor-metal-polymer composite	1
	Prof. N. R. Bandyopadhyay	Metal oxide based high dielectric composites for supercapacitor applications	1
	Prof. Mallar Ray	Low Dimensional Thermoelectric and Plasmonic Materials	1
	Prof. Arijit Sinha	Structural Polymeric Composite	1
	Prof. Prosenjit Saha	Polymeric Nano Composite, Polymeric Bio-material	1
School of Safety and Occupational Health Engineering	None in this cycle		
School of VLSI Technology	Prof. Partha bhattacharyya	Nano Material Based Hybrid Devices for Gas Sensing Applications	1

Centre of Excellence for Green Energy and Sensor Systems	Prof. Hiranmay Saha, CEGESS, and Prof. Konika (Das) Bhattacharyay, Electrical Engineering	Solar PV Systems	1
Centre for Healthcare Science and Technology	Prof. Chitragada Das Mukhopadhyay	Cancer biology and neurodegenerative diseases	4
	Prof. Ananya Barui	Stem cell Biology	1
	Prof. Pallab Datta	Biomaterial Synthesis	1
		Tissue engineering by 3D printing	1
Humanities and Social Science	Prof. Madhumati Dutta	Environmental Economics	2
School of Mechatronics & Robotics.	Prof. Subhasis Bhaumik	Mechatronics / Robotics / Bio-medical devices	1

- The admission calendar, fee structure, academic regulations will be as per regular PhD admission process of the institute. For details see the PhD regulations (**to be revised shortly**) in the website www.iiests.ac.in.
- Applicants seeking admission under this scheme are required to apply on-line by downloading the application form and submitting the duly filled-up admission form (with the details of the draft) and the scanned copy of the M. Tech/M.Sc, DOB, GATE/NET and category (SC/ST etc.) certificates, if applicable, (all in PDF form) to the following e-mail address

phdjan16@iiests.ac.in

on or before **4 PM, 4 February 2016**.

- An applicant may make separate applications (with separate draft for each application) to more than one unit if he/she fulfills the eligibility criteria for that unit.

Applicants need to pay Rs. 300/- (Rs. 150/- for the SC/ST candidates) by demand draft/pay order addressed to “REGISTRAR, IEST, Shibpur” and payable at Kolkata.

- The draft (details given by the candidate in the application form) will be treated as admit card and would be collected from the candidates during the test.
- Note that there would be a common admission test.
- Candidates applied for multiple units (dept./centre/school) need to appear in the common test and hand over all the drafts.
- There will be separate interviews in the unit level and candidates clearing the common test could appear multiple interviews if he/she has applied for those units.

Important Dates: **LAST DATE OF APPLICATION: 4 February 2016**

Application: i) Application starts ii) Notification of Shortlisted Candidates for Test	Date & Time of the TEST and venue	Notification of Shortlisted Candidates after test	Date : Interview	Admission cum enrollment
i) 20 January 2016 (through e-mail only) ii) 6 February 2016 (in the respective Unit/website)	10 February 2016: 3:30 -- 5 PM Venue: Corresponding Unit (department/center/school)	10 February 2016 7:30 PM (in the respective unit /Website)	11 and 12 February 2016 10 AM onwards in the respective unit. (Publication of the result in the respective unit and on the website: 6:30 PM on 12 February 2016)	15 and 16 February 2016 (verification of the of the original documents followed by payment of fee and enrollment: Dean's Office)

- Candidates selected for admission/enrollment (15 to 16 February, 2016) must come prepared with all original certificates for verification of documents. They are also supposed to submit the photocopies of all their certificates, two passport size photographs and certificate for the blood group.

TEST

- A Common admission test for all candidates.
- 1½ hr MCQ type with two and a half marks for each correct answer and minus half marks for each wrong answer.
- Question will be based on Secondary+ level Arithmetic, logical reasoning and English.

Application CHECKLIST

The candidates are supposed to provide the scanned copy of the following certificates along with the duly filled-in application form (PDF).

- M.E/M. Tech/M.Sc mark-sheet
- GATE/NET Score card; if applicable
- Proof of date of birth.
- Community certificate (SC/ST/OBC) from a competent authority; if applicable

An application without the copies (scanned PDF form) of the required documents is liable to be rejected.

Visit www.iiests.ac.in for announcements on change of dates etc. related to the PhD admission.

The application must be mailed to:

phdjan16@iiests.ac.in

with the subject field as "Phd admission:" followed by the Name of the Department for which the admission is sought (e.g.; PhD admission : VLSI) on or before 4 PM, January 2016.

For further queries (email only):

Send email to phdjan16@iiests.ac.in with the subject field as "Query for PhD"

Dean (academic)