INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY, SHIBPUR

PhD Admissions in July 2016

Applications are invited from Indian nationals for admission to PhD Program in the portal available on the website (use this link) for admission to the PhD programme in July cycle of the academic year 2016-17. Application can be done for full-time mode (with or without scholarships) and for part-time mode (without scholarships). Forty (40)Institute scholarships (as per MHRDs new revised scale), in total, 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
   (b) 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 IIEST, 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 fulfilled.

Above eligibility conditions are the 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 Scholars
Aerospace Engineering and Applied Mechanics	Dr. Amit Roychowdhury	Biomechanics and Biomaterials	1
	Dr. Koustuv Debnath	Turbulence	1
	Dr. Mihir Chandra Manna	Structural Engineering	1
	Dr. Nityanandya Nandi	Hydraulic Structures	1
	Dr. Niloy Khutia	Plasticity, Fatigue and Fracture	2
	Dr. Pabitra Halder	Computational- Fluid Dynamics/ Heat Transfer /Aerodynamics	2
	Dr. Prithwish Kumar Das	Earthquake Engineering & Structural Dynamics	1
	Dr. Rana Roy	Earthquake Engineering & Structural Dynamics	1
	Dr. Salil Haldar	Optimization of composite plate/shell structures	1
	Dr. Sujay Kumar Mukherjea	Aircraft Design	1
Architecture, Town and Regional Planning	Prof. Aditya Bandyopadhyay	Urban Planning Models, Regional Planning Models, Urban Planning, Regional Planning, Sustainable Planning, Architecture.	2
	Prof. Souvanic Roy	Planning for ecologically fragile region. Architectural/Urban Conservation. Climate change adaptation in city planning Space syntax in architecture/planning	2
	Prof. Arup Sarkar	Conservation/Environmental Planning/RS GIS/Urban and regional planning	4
	Prof. Swati Saha	Urban and environmental planning, heritage conservation planning	2
	Prof. Keya Mitra	Disaster studies-urban disaster risk mitigation, cultural heritage protection and mitigation, urban studies, history of architecture, architecture and human behaviour.	1
	Prof. Parthasarathi Mukhopadhyay	Disaster resistant architecture, Urban design, Evolution of architecture	1
	Dr. Subrata Kr.Paul	Urban / transportation planning Urban conservation/heritage tourism	1
	Dr. Soumen Mitra	1. Planning in ecologically fragile areas 2. History/Theory of Architecture	2
Chemistry	Prof. J. Datta	Electrochemistry, Fuel Cells Technology, Thin Film Solar Cells, Dye-sensitized solar cell	1
	Prof. B. Adhikary	Coordination Chemistry & Nanomaterials	1
	Prof. S. K. Chattopadhyay	Coordination and Bioinorganic Chemistry	1
	Prof. P. K. Nandi	Computational and Theoretical Chemistry	2
	Prof. B. K. Ghorai	Synthetic Organic and Organometallic Chemistry, Molecular Design and Synthesis of Organic π-Conjugated Materials for Optoelectronic Applications.	2
	Prof. Sudip K. Chattopadhyay	Theoretical Molecular Sciences	1
	Dr. J. Ganguly	Carbohydrate Chemistry, Synthesis of Hydrogel	2
	Dr. C. Bhattacharya	Electrochemistry, Photoelectrochemical Solar Cells, Conducting Polymers	1
	Dr. P. Biswas	Bio-coordination chemistry and nanomaterials	2
	Dr. N. D. Paul	Homogeneous catalysis and bio-inspired coordination chemistry	2
	Dr. Debjani Ganguly	Molecular modeling and simulation of Biomacromolecules	1
Civil Engineering	Prof. Kalyan K Chattopadhyay	Geotech. Engg: Soil Dynamics, Depp foundation	1
	Prof. Sudip Kumar Roy	Traffic System Planning, Tranportation Modelling	1
	Prof. Ambarish Ghosh	Geotechnical Engg: Environmental Geotechnics, Ground Improvement, Soil Dynamics and Geotechnical Earthquake Engg.	1
	Prof. Chaitali Roy	Composite materials and Structures, Application of Finite element method, Structural Dynamics, Experimental and numerical modeling of FRP	1

	Prof. Aparna (Dey) Ghosh	Structural Engg : Vibration control of structures	1
	Prof. Debabrata Mazumder	Desalination of Water, Membrane Bio-reactor, Wastewater Reclammation, Phytoremediation	2
	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. Chanchal Majumder	Environmental Engineering: Heavymetal and Organic pollutant removal from ddrinking water and modelling	1
	Prof. Soumya Bhattacharjya	SStructural Engg : Optimization under Uncertainty, Wind vulnerability assessment of structure	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. Ujjal Saha	Water Resources Engg : Climate Change Impact on Water Resources. Urban Hydrology. Stochastic Rainfall Modeling, Rainfall-Runoff modeling	2
Computer Science and Technology	Dr. Abhik Mukherjee	Control systems	1
	Dr. Asit Kumar Das	Data Mining, Text Mining, Social Networks	1
	Prof. Biplab K Sikdar	Computer Architecture, Intruder detection - big data, Cellular Automata applications	2
	Prof. Jaya Sil	Data Science and Advance Analytics	1
	Dr. Samit Biswas	Computer Vision - Pattern Recognition, Natural Language Processing	2
	Dr. Saptarshi Ghosh	Big data mining, social networks, machine learning	2
	Prof. Sipra DasBit	Data Management - wireless network	1
	Prof. Sulata Mitra	5G cellular wireless networks	1
	Prof. Susanta Chakraborty	Next Generation Sequencing, Approximate Computing - Image Processing, Big Data	2
	Prof. Uma Bhattacharya	Routing/spectrum allocation - Elastic Optical Networks	2
Earth Science	NOT IN THIS CYCLE		
Electrical Engineering	Dr. Anindita Sengupta & Prof. Ashoke Sutradhar	Design of Cascade Controllers for Multivariable Systems	1
	Prof. Sukanya Parui	Nonlear Phenomena in Power Electronic Circuits	1
	Prof. Prasid Syam	Power electronics and drives area	1
	Prof. Debabrata Roy	Controller for repulsive type magnetic bearing	1
	Dr. Amalendu Bikash Choudhury	"Design optimization and performance evaluation of superconducting fault current limiter using genetic algorithm and finite element analysis "	1
	Prof. Ashoke Sutradhar	Design of Controllers for Multivariable Processes with Time Delay	1
	Prof. Debasis Sarkar & Prof. Ashok Naskar	Application of FEM on Electrical Devices	1
Electronics and Telecommunication Engineering	Prof. Chirasree RoyChaudhuri	biosensors, graphene devices	1
	Prof. Partha Bhattacharyya	Graphene derivative based gas sensor devices/Microelectronics	1
	Prof. Monojit Mitra	EMI/EMC	1
		Microstrip Antenna Design/ 4G communication	1
	Prof. Tamaghna Acharya	Wireless communications and networks	1
	Prof. Susanta Kumar Parui	Antenna Engineering	1
		Microwave circuit and System	1
	Prof. Ayan Banerjee	VLSI Architecture Design for Signal Processing Systems	1

Department	Faculty	Research Area	No.
Information Technology	Dr. Arindam Biswas	Medical Image Analysis and Image Analysis using Digital Geometry	1
	Dr. Indrajit Banerjee	Security in Cloud Computing	1
Mathematics	Prof. B. Mukhopadhyay	Thermo elasticity	1
	Prof. B. S. Choudhury	Quantum Mechanics	1
	Prof. T. K. Roy	Fuzzy Optimization	2
	Prof. P. Saha	Fuzzy Mathematical Systems	2
	Prof. S. Pal (Sarkar)	Thermo elasticity,	2
		Optimization in uncertain environment	
	Prof. P. Das	Neural Network and its Applications in Biology	2
	Prof. G. P. Samanta	Mathematical Biology	1
	Prof. T. K. Kar	Mathematical Ecology	1
	Prof. B. S. Choudhury	Astrophysics and Cosmology	1
	Prof. A. K. Dhar	Fluid Dynamics	2
Mechanical Engineering	Prof. Santanu Kumar Karmakar	Tribology and Bio-Tribology	1
	Prof. Debasis Datta	Ultrasonic NDE, FEM based simulation	1
	Prof. Somnath Chakrabarti	Fluid Flow Analysis & Bio-Medical Engineering	1
	Prof. Partha Pratim Dey	Fracture Mechanics	1
	Prof. Subash Chandra Mondal	Cutting Tool Material Development, Robust Manufacturing	1
Metallurgy and Materials Engineering	Prof. S. K. Ghosh	Phase transformation and mechanical behaviour of steel	1
	Dr. M. Ghosh	Thermo-mechanical processing of aluminium alloys	2
	Dr. D. Das	(i) Structure-property correlation of materials and (ii) Nano-composites	2
	Dr. S. Kundu	Friction stir welding of dissimilar metals and alloys	1
Mining Engineering	Prof. Pratik Datta	Geomechanics	2
		Rock Fluid Flow Analysis	1
	Prof. Suranjan Sinha	Mine Planning and Design	1
	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
	Prof Sudipta Mukhopadhyay	Coal and Mineral Beneficiation	1
		Material Handling	1

Physics	Prof. Dipali Banerjee	Nanomaterials and their applications in Condensed matter Physics	1
	Prof. B. K. Guha	Material Physics	1
	Prof. S. Sarkar	Nuclear structure and Nuclear Astrophsics	3
	Prof. Mousumi Basu	Fiber/waveguide optics in linear and nonlinear domain	1
	Prof. Samar Jana	Optical properties of rare earth glasses and Nano-materials	2
	Prof. Manish Pal Chaudhury	Nanomaterials and Nanoelectronics	1
	Prof. Abhijit Bisoi	Spectroscopic study in A~ 40 region (Nuclear structure and Nuclear Astrophsics)	1
	Prof. Dwipesh Majumder	Fractional Quantum Hall effect/ Quantum computer	1
School of Community Science and Technology	Prof. Sujay Kr. Mukherjea and Prof. Jayati Bhowal	Food Microbiology	1
School of Ecology, Infrastructure and Human Settlement Management	NOT IN THIS CYCLE		
School of Management Sciences	NOT IN THIS CYCLE		
School of Materials Science and Engineering	Prof. S. Chatterjee	Hard and Optically Transparent Nano-Composites Coating	1
	Prof. N. R. Bandyopadhyay	Nano-Materials & Composites, Computational Materials Design	3
	Prof. Mallar Ray	Nano-Structure Based Thermoelectric	1
	Prof. Prosenjit Saha	Polymeric Nano Composite, Polymeric Bio-material	3
	Prof. Diptonil Banerjee	Optical and Electronic Applications of Carbon Nano-structures and related Hybrid	2
School of Safety and Occupational Health Engineering	NOT IN THIS CYCLE		
School of VLSI Technology	Dr. Tuhina Samanta	Design of algorithms for VLSI interconnects	1
	Dr.Chandan Giri	3D VLSI Design and Test	1
	Dr. Partha Bhattacharyya	Graphane Based Hybrid Sensor System	1
	Prof. Hafizur Rahaman	Anlog and Mixed Signal VLSI (Part time)	1
Centre of Excellence for Green Energy and Sensor Systems (CEGESS)	Prof. Hiranmay Saha, CEGESS, andProf. Konika (Das) Bhattacharyay, Electrical Engineering	Solar PV Systems	1
	Dr. Avra Kundu, CEGESS and Dr. S. Minhaz Hossain, Dept. of Physics	High Efficiency Ultra-Thin Monocrystalline Silicon Solar Cells	1
	Dr. Nillohit Mukherjee, CEGESS and Dr. Chirasree Roychaudhuri, Dept. of ETCE	Optoelectronic and Sensing Properties of Highly Porous Inorganic and Organic-Inorganic Hybrid Frameworks	1
	Dr. Nillohit Mukherjee, CEGESS and Dr. Chirasree Roychaudhuri, Dept. of ETCE	Modified Metal-Oxide Semiconductors for Energy, Environmental and Sensing Applications	1

	Dr. Snehangshu Patra, CEGESS and Dr. Sukumar Kundu, Dept. of Met. and Materials Engg.	High Energy Density Cost Effective Metal-air Battery	1
	Prof. Partha Chaudhuri, CEGESS and Prof. Dipali Banerjee, Dept. of Physics	Solar PV Devices	1
Centre for Healthcare Science and Technology	Prof. Chitrangada Das Mukhopadhyay	Cancer Biology/ Neurodegenerative disease	2
	Prof. Ananya Barui	Stem cell Biology	1
	Prof. Pallab Datta	Biomaterial Synthesis	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 through the admission portal available on the website (www.iiests.ac.in) on or before 26 July 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.

- A scholar who is already enrolled without any scholarship is also eligible to appear in this examination to migrate to a full-time with scholarship mode.

Applicants need to pay Rs. 300/- (Rs. 150/- for any women candidates and candidates belong to SC/ST/PWD category) by demand draft/pay order addressed to "REGISTRAR, IIEST, Shibpur" and payable at Kolkata.

- The draft
- (details given by the candidate in the application form through the portal) along with the copy of the application submitted through the portal will be treated as admit card. The draft(s) 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 for APPLICATION: 26 July 2016

Application: i) Application starts ii) Notification of Shortlisted Candidates for Test	Date & Time of the TEST and venue	Notification of Shortlisted Candidates selected for Interview	Date : Interview (Publication of Result)	Admission cum enrollment

i) 6 July 2016 (through website only) ii) 28 July 2016 (website)	**Wednesday: 3 August 2016: 2:00– 3:30 PM** **Venue: Corresponding Unit (Department/Center/School)**	4 August 2016 6:30 PM (Website)	8 and 9 August 2016. 10 AM onwards in the respective unit. (6:30 PM : 10 August 2016)	11,12 and 16 August 2016 (verification of the of the original documents followed by payment of fee and enrollment: Dean's Office)

- Candidates selected for admission/enrollment must come prepared with all original certificates for verification of documents on 11, 12 or 16 August 2016. 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 marksfor each correct answer and minus half marks for each wrong answer.
- Question will be based on Secondary+ level Arithmetic, logical reasoning and English.

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

For further queries (email only):
Send email to phdjuly16@iiests.ac.inwith the subject field as "Query for PhD"

Dean (Academic)