Last date for online application: 15th October 2012 12:00 Midnight

Last date for receiving application: 18th October 2012 5:00 PM

Indian Institute of Technology Bhubaneswar invites application for admission to Ph.D. Programme from candidates in the following categories:

- 1. Regular full-time scholars with Institute Assistance.
- 2. Sponsored Scholars: Candidates who possess the minimum prescribed qualifications and are in service in any of the following establishments shall be eligible for admission to the Ph.D. program as Sponsored Scholars:
- i) Defence or other ministries of the Government of India or any other government organizations;
- ii) Established industrial research and development organizations
- iii) Autonomous bodies and public undertakings
- iv) Universities/Colleges

#### 1) School of Basic Sciences:

Organometallics, Green Chemistry, Supramolecular Chemistry, Molecular Recognition, Organic Solid State Chemistry, Polymorphism, Coordination Chemistry, Magnetic Materials, Bioinorganic Chemistry, Organic Synthesis, Theoretical Chemistry, Biophysical Chemistry, Protein Chemistry & Biochemistry, Biological and Catalytic Activity of Transition Metal Complexes, Functionalized Nanoparticles and Biosensors Complex

Dynamics, Fractals, Combinatorial Matrix Theory, Spectral Graph Theory, Queuing Theory, Applied Probability Models, Stochastic Models in the Operations Research, Biology and Mathematical Finance, Optimization Theory, Geometric Programming, Artificial Neural Network, Applied Functional Analysis, Optimization theory, Complementarity Problems, Plasmonics and Optical Sensors, String Theory, Nanostructure Materials, Soft Condense Matter, Accelerated Based Atomic Molecular Physics, Ion-surface and Ion-biomolecule Interactions, Thermo-electrics, Multiferroics and Nano-magnetism, Experimental High Energy Physics, Black Holes and Quantum Gravity, Quantum Dissipation, Nanomagnetism.

- 2) School of Earth, Ocean & Climate Sciences: Element Mobilization & Transport, Saltwater Migration, Low Temperature Aqueous Geo-Chemistry, Ocean Chemistry and Sediment Characteristics, Satellite Data Analysis and Applications, Polar Research, Atmospheric Chemistry and Air Quality, Cloud-Aerosol Interactions, Mesoscale Meteorology, Tropical Cyclone Modeling, Physical Parameterizations, Monsoon Variability.
- 3) School of Electrical Sciences:
  Power Electronics and Drives, Power System Engineering,
  Wireless and Mobile communication, Digital Signal
  Processing, Digital and Adaptive Control, Digital
  Communication, Optical Communication Systems, VLSI
  and Embedded Systems, Soft and Evolutionary Computing.
- 4) School of Humanities, Social Sciences and Management:

#### **Economics**

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Environmental Economics, Natural Resources Economics, Macroeconomics, Development, Economics & Rural Development

## English

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Indian Writing in English, Post Colonial Literature, Travel Writing, Business Communication, American Literature, Canadian Literature, ELT, Cross Cultural Communication, Autobiography

### Psychology

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Consumer Behavior, Cyber Psychology, Clinical Psychology, Cognitive Psychology, Cognitive Neuroscience, Psycholinguistics, Psychology of Personality, Marketing

- 5) School of Infrastructure (Civil Engineering): Structural Engineering, Geotechnical Engineering, Hydraulics and Water Resources Engineering, Transportation and Highway Engineering, Environmental Engineering.
- 6) School of Mechanical Sciences (Mechanical Engineering, Metallurgical & Materials Engineering): Computational Fluid Dynamics, Fluid Mechanics, Turbulence, Heat Transfer, Pulse Heat Transfer in

Manufacturing Analysis, Composite Materials, Sandwich Structures, Fracture Mechanics, Composite Materials, Smart Composite Structures, Vibration, Fracture Mechanics, Solid Mechanics, Operations Management, Supply Chain Management, Quality Control, Industrial Noise Control, Condition Monitoring.

7) School of Minerals, Metallurgical and Materials Engineering:

Mineral processing, Material Processing, Nano Materials, Bio-Medical Materials (Synthesis and Devices), Physical Metallurgy (Structure Property Relationship), Modelling and Simulation of Materials.

Eligibility Programme Eligibility Criteria

PhD (Engineering)

60% marks or 6.75 CGPA in M. Tech/M.E with consistently good academic record OR B.Tech/B.E with 70% or 7.5 CGPA with valid GATE Score (very good) and consistently good academic record in the relevant field.

PhD (Science)

1st class in M.Sc. / M. Tech with consistently good academic record (equivalent CGPA) and valid GATE/NET CSIR/UGC score in the relevant field.

# PhD (HSS)

55% marks or equivalent CGPA in Master degree with UGC/NET score OR M. Phil degree in the relevant field.