

# भारतीय प्रौद्योगिकी संस्थान खड़गपुर

Advertisement No.: R/01/2023 Dated January 01, 2023

**Subject: Advertisement for various Faculty Positions** 

Indian Institute of Technology Kharagpur, an Institute of Eminence (IoE), is the first and the largest in the chain of IITs engaged in teaching, research and development requires faculty for its various academic units. The Institute invites online applications from Indian nationals, Persons of Indian Origin (PIOs) and/or Overseas Citizens of India (OCI) [\*], possessing excellent academic background, commitment to top quality teaching and proven credentials for carrying out outstanding research and development for various Departments / Centres / Schools / Academy :

[\*] Foreign Nationals (other than OCIs and PIOs) are encouraged to apply for faculty positions for fixed tenure not exceeding five years on contract basis subject to clearance from Government of India (GoI).

# **FACULTY OF BIO-TECHNOLOGY AND BIO-SCIENCES**

1) Department of Biotechnology

2) School of Medical Science and Technology

# **FACULTY OF ENGINEERING AND ARCHITECTURE**

## Mechanical Sciences Division:

1) Department of Aerospace Engineering

2) Department of Agricultural and Food Engineering

3) Department of Civil Engineering

- 4) Department of Mechanical Engineering
- 5) Department of Metallurgical & Materials Engineering

6) Department of Mining Engineering

7) Department of Ocean Engineering & Naval Architecture

# Electrical & Computer Sciences Division:

1) Department of Electrical Engineering

- 2) Department of Electronics & Electrical Communication Engineering
- 3) Department of Computer Science & Engineering

4) G. S. Sanyal School of Telecommunications

5) Centre of Excellence in Artificial Intelligence

# Chemical Sciences Division:

- 1) Department of Chemical Engineering
- 2) Rubber Technology Centre

# Architecture, Design & Planning Division:

1) Department of Architecture & Regional Planning

2) Ranbir and Chitra Gupta School of Infrastructure Design & Management

#### **FACULTY OF SCIENCES**

1) Department of Physics

- 2) Department of Chemistry
- 3) Department of Mathematics
- 4) Department of Geology & Geophysics

# **FACULTY OF HUMANITIES, SOCIAL & ECONOMIC SCIENCES**

1) Department of Humanities & Social Sciences

2) Centre for Rural Development and Innovative Sustainable Technology

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#### **FACULTY OF INTERDISCIPLINARY SCIENCE & ENGINEERING**

- 1) Department of Industrial & Systems Engineering
- 2) Materials Science Centre
- 3) Cryogenic Engineering Centre
- 4) Advanced Technology Development Centre
- 5) Deysarkar Centre of Excellence in Petroleum Engineering
- 6) School of Nano-Science & Technology
- 7) Partha Ghosh Academy of Leadership
- 8) Centre of Excellence on Safety Engineering & Analytics (COE-SEA)
- 9) Rajendra Mishra School of Engineering Entrepreneurship
- 10) Centre of Excellence for Indian Knowledge Systems

# **SCHOOL OF LAW**

1) Rajiv Gandhi School of Intellectual Property Law

# **SCHOOL OF MANAGEMENT**

1) Vinod Gupta School of Management

#### **IMPORTANT NOTE**

- The areas of specializations in Departments/Centres/Schools/Academy shall be based on the requirement by the respective Departments/Centres/Schools/Academy.
- The list of Department/School/Centre/Academy wise specialisations may be viewed at the home page of the online application portal.
- The Institute reserves the right to shortlist the candidates as per the requirement of the respective Department/Centre/School/Academy depending upon exigencies. Prospective Candidates are advised to constantly visit the Institute's website for updates.

#### **ELIGIBILITY CRITERIA**

Posts: Professor, Associate Professor and Assistant Professor

**Qualifications for the Post:** Ph.D. with first class or equivalent at the preceding degree in the appropriate branch with a very good academic record throughout. *Ph.D. should have been awarded on or before the last date of application.* 

**Experience for the Posts:** 

Posts	Experience required for the post					
Professor	A minimum of 10 years' teaching / research / industrial experience of which at least 4 years should be at the level of Associate Professor in IITs, IISc Bangalore, IIMs, NITIE Mumba and IISERs or at an equivalent level in any such other Indian or foreign Institution(s) of comparable standards.					
Associate Professor	A minimum of 6 years teaching / research / industrial experience, of which at least 3 years should be at the level of Assistant Professor or equivalent positions in IITs, IISc Bangalore, IIMs, NITIE Mumbai and IISERs or in any such other Indian or foreign Institution(s) of comparable standards.					
Assistant Professor Grade I	At least 3 years teaching / research / industrial experience, excluding however, the experience gained while pursuing Ph.D.					
Assistant Professor Grade II	<ul> <li>Candidates with less than 3 years experience may be appointed on contractual basis as Assistant Professor Grade II.</li> <li>At the entry level they may be placed in Level 10 of Pay Matrix with basic pay of Rs. 70,900 or Rs. 84,800 in Level 11 of Pay Matrix depending upon the experience and shall move to level 12 of Pay Matrix with a minimum basic pay of Rs. 1,01,500 on completion of 3 years of requisite experience and on assessment of satisfactory performance.</li> </ul>					



Pay level and Pay Matrix for the Posts:

Position	Level and Pay Matrix	Pay Band (Pre- revised)	AGP (Pre- revised)	Minimum basic pay in pay level	Gross emoluments (approx) including DA/Transport Allowance at the prevailing rate
Professor	Level-14A Pav Matrix:	PB-4 Rs. 37,400-	Rs. 10,500	Rs. 1,59,100	Rs. 2,24,526
	Rs.159100-220200/-	67,000/-	Ks. 10,500	Ks. 1,59,100	NS. 2,24,320
Associate Professor	Level-13A2 Pay Matrix: Rs. 139600-211300/-	PB-4 Rs. 37,400- 67,000/-	Rs. 9,500	Rs. 1,39,600	Rs. 1,97,616
Assistant	Level-12	PB-3			
Professor	Pay Matrix:	Rs. 15,600-	Rs. 8,000	Rs. 1,01,500	Rs. 1,45,038
Grade I	Rs. 101500-167400/-	39,100/-			

<sup>\*</sup> Assistant Professor Grade I in IITs, IISc Bangalore, IIMs, NITIE Mumbai and IISERs on completion of 3 years of service shall move to Level 13A1 of Pay Matrix and will, however, continue to be designated as Assistant Professor Grade I.

**Reservation:** Without any compromise on qualification, experience and competence, reservation for SC/ST/OBC/EWS/PWD categories is applicable as per MHRD/Government of India rules. The certificates issued by the Competent Authority needs to be attached in support of his/her claim.

**Accommodation:** Suitable residential accommodation as per rules will be provided in the Campus of the Institute on joining the Institute.

#### Incentives for pursuing Excellence in teaching and research:

- a) Faculty Start Up Research Grant (FSRG) be provided to new faculty members to develop a strong research proposal for extramural support, with a part of the background work being funded by an intramural start up grant.
- b) A Cumulative Professional Development Allowance (CPDA) of Rs. 3 Lakhs for every block period of 3 years (Rupees one lakh per year) may be made available to every member of the faculty on reimbursable basis to meet the expenses for participating in both national and international conferences, paying the membership fee of various professional bodies and contingent expenses.
- c) An additional amount of Rs. 50,000/- is given to a faculty member for attending conferences abroad who is a Principal Investigator of a Sponsored Project amounting to at least Rs. 15 Lakhs and has at least three Published Papers in referred journals in the preceding three years.
- d) Reimbursement of relocation charges within India / abroad of upto Rs. 1,50,000/- to the faculty members at the time of their joining.
- e) Interest free soft advance of Rs. 50,000/- to the newly recruited faculty members.
- f) Honorarium of Rs. 15,000/- per month to the faculty members who have been awarded the S.S. Bhatnagar Prize OR who are fellows of at least two National Academies.
- g) Transport Allowance and re-imbursement of Telephone bills upto Rs. 1500/- per month as per rules.
- h) Free local telephone facility in the Department as well as residences within the campus.
- i) Children Education Allowance (CEA) / LTC facility as per Government of India rules.
- j) Medical facility for self and other dependent family members in the B C Roy Technology Hospital within the campus and for referrals to Speciality Hospitals as per IIT Kharagpur rules.

# **General Information**

- Minimum requirement of experience may be relaxed in respect of outstanding candidates.
- Degrees obtained by the candidate should have been awarded by a recognized University / Institute.

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 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,

interaction in the department, etc.

• The candidates should be preferably below 35 years of age for the post of Assistant Professor.

• 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.

• Travel support to the extent of Air fare (economy class) by the shortest route within India and Institute Guest House facilities free of charges in the campus to the candidates for appearing in the interview for faculty position.

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 & experience are required to **apply online ONLY** (https://erp.iitkgp.ac.in/Jobs/auth/facapps.htm) on or before **28.02.2023**.

Hardcopy of the application is not required. Candidates are requested to upload PDF files of all degree certificates/testimonials/caste certificate/age proof certificate etc. as file attachment at an appropriate place.

For any other details please contact Deputy Registrar, E-III, Email: recsec@adm.iitkgp.ernet.in

If any technical problem encountered with online application, please contact through phone: +91-3222-281017/18/19.

Candidates may also contact the Heads of the various Departments / Centres / Schools / Academy. Their address, phone numbers and email are available on Institute webpage.

कुलसचिव / Registrar



# भारतीय प्रौद्योगिकी संस्थान खड़गपुर INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

#### Advertisement No.: R/01/2023 Dated January 01, 2023

**Subject:** Specializations for Faculty Recruitment against advertisement No.: R/01/2023 Dated January 01, 2023.

# **FACULTY OF BIO-TECHNOLOGY AND BIO-SCIENCES**

#### 1) Department of Biotechnology

Biochemical Engineering; Bioprocess Engineering; Biological Engineering; Chemical Engineering; Molecular Parasitology with relevant R&D experience at the M.Tech, PhD and Postdoc levels in Biochemical/Bioprocess/Biological Engineering; Metabolic Engineering with relevant hands-on R&D experience at the PhD and Postdoc levels; Systems and Computational Biology/Synthetic Biology with relevant hands-on R&D experience at the PhD and Postdoc levels. Plant Biotechnology/Plant Metabolic Engineering/Plant Genetic Engineering with relevant R&D experience at the PhD and Postdoc levels.

# 2) School of Medical Science and Technology

Biophysics/Biological Physics, Computational Biology/Medical Statistics, Medical Physics, Electronics/Electrical Engineering with relevant hands-on R&D experience in healthcare areas

#### **FACULTY OF ENGINEERING AND ARCHITECTURE**

#### Mechanical Sciences Division:

#### 1) Department of Aerospace Engineering

Reconfigurable Helicopter, Aircraft and Satellite Control, Avionics, Inertial Navigation, Inter-Planetary Satellite Mission, Hypersonic and Supersonic Combustion, Ion and Electric Propulsion, Real Time Control of Aerodynamics for Drag Reduction, Aircraft Design, Aeroelasticity, Vibration control of Large Aerospace Structures (At least one degree in Aerospace Engg.)

### 2) Department of Agricultural and Food Engineering

Farm Machinery & Power [Precision Agriculture, Human factors, AI & ML applications, Automation/robotics in agricultural operations]; Food Process Engineering [Equipment & Machine Development with hygienic practices & automation, AI & ML applications, Transport Processes]; Aquacultural Engineering [Design of hydraulic structures/ fresh & brackish water farm structures/ fishing gear & cage culture for improved fish production; Fisheries biology].

# 3)Department of Civil Engineering

Hydraulic and Water Resources Engineering; Transportation Engineering; Environmental Engineering; Geotechnical Engineering; Structural Engineering

# 4) Department of Mechanical Engineering

For fresh recruits:

Additive Manufacturing; Machining & micro-machining; Surface Engineering; Precision- Micro-Nano- Engineering; Non-traditional Manufacturing; Robotics; Autonomous Systems & Automation; Casting, Welding & Forming; Thermo-fluid analysis and/or design of Engineering Systems; Thermo-fluid analysis of Biological Systems; Sustainable Energy, Clean energy, Energy storage; Micro and nano-scale fluid flow and heat transfer; Interfacial and Multi-phase flows; Multi-scale and Multi-physics simulation; Refrigeration and Air conditioning; Gas Turbines; IC Engines; Turbomachinery; Multi-body dynamics and control; Mechanics of advanced materials (cellular structures and Metamaterials); Mobility systems; Rotor dynamics; Experimental solid mechanics; Machine condition monitoring; Biomedical engineering;

It is expected that the applicants have excellent academic background throughout, having all BE/BTech and ME/MTech or equivalent degrees in Mechanical/Manufacturing/Production Engineering with minimum 70% marks or 7.5/10 CGPA at the Bachelor and Master level, and PhD in the relevant specialisation they are applying for. Candidates belonging to the thermo-fluid science and engineering specialisation need to have BE/BTech and ME/MTech or equivalent degrees in Mechanical Engineering.

#### 5) Department of Metallurgical & Materials Engineering

Sustainable Extractive Metallurgy; Processing of Materials (Joining of Materials, solidification, Additive Manufacturing, etc.); Functional Materials (Energy Materials, Magnetic Materials, Electronic Materials including Thin Films, Bio Materials, etc.); Corrosion and High Temperature Oxidation; Any other Emerging Areas in Metallurgical and Materials Engineering.

#### 6) Department of Mining Engineering

Safety, Ventilation, Mine Planning, Mine Environment, Mining Machinery, IoT-Data Analytics, Mine Automation, Mineral Economics, Critical Mineral Processing, Mining Instrumentation, Mining Electrical Requirements, Green Mining, Sustainable Mining, Mineral Business.

#### 7) Department of Ocean Engineering & Naval Architecture

Marine Hydrodynamics including CFD, potential flow simulations; Marine Structures including Marine safety and risk assessment; Wave hydrodynamics and hydroelasticity; Ship design and production; Control systems of ships/underwater vehicles

#### Electrical & Computer Sciences Division:

#### 1) Department of Electrical Engineering

Machine Drives and Power Electronics, Control Systems, Power and Energy Systems, Instrumentation and Signal Processing.

#### 2) Department of Electronics & Electrical Communication Engineering

Communications, Signal Processing, Wireless Networks, Image and Video Processing, Machine Learning, Circuits and Systems for Signal Processing, VLSI Design, RF and Microwave Engineering, Antenna and Propagation, RFIC.

# 3) Department of Computer Science & Engineering

Compilers and Programming Languages, Computer Systems (Computer Architecture, Operating Systems, Networked Systems, System Security, Distributed Systems and Cloud Computing, GPU Computing), Software Engineering, Database Systems, Pervasive Computing, Algorithms and

Theoretical Computer Science, Privacy, Security & Cryptography, Embedded and Cyber Physical Systems, Artificial Intelligence and Machine Learning, Natural Language Processing and Information Retrieval, Data and Web Mining, Computer Vision and Image Processing, Complex and Social Networks, Formal Methods, VLSI and Electronic Design Automation, Bioinformatics and Computational Biology, Quantum Computing, Human Computer Interaction.

# 4) G. S. Sanyal School of Telecommunications

Wireless Communications, Wireless Networks, Optical Networks, Optical Communications, Telecommunication Security, Information Theory, Signal processing for Communications.

#### 5) Centre of Excellence in Artificial Intelligence

Machine Learning (ML): Deep learning, Reinforcement learning, Probabilistic and Bayesian models, Federated learning, Quantum ML, etc.)

Artificial Intelligence (AI): Search and optimization, Knowledge representation and reasoning, Game theory, Multi-agent systems, Planning, Reasoning under uncertainty)

Theoretical, Statistical, Mathematical foundations of AI / ML

Natural Language processing, Speech Processing, Text and Data Mining; Information Retrieval; Computer Vision; Robotics; Knowledge Modeling; Cognitive AI; Human-Computer Interactions

Hardware and Systems for AI and ML; Big Data; Data Engineering;

Ethics of AI (fairness, accountability, transparency, explainability, bias, safety, privacy, trustworthiness); Responsible AI

Applications of AI to domain areas (such as but not limited to Cyber-physical systems, healthcare, bioinformatics, manufacturing, education, energy, earth sciences, transportation, communication, hardware design, social themes, agriculture, law)

# **Chemical Sciences Division:**

# 1) Department of Chemical Engineering

Transport Phenomena, Fluid flow; Heat and Mass Transfer, Reaction Engineering, Thermodynamics; Instrumentation and Process Control, Pollution control; Biomaterials, Nano and Composite materials; Bioengineering.

#### 2) Rubber Technology

The areas of specializations are as per the requirement of the academic unit.

# Architecture, Design & Planning Division:

#### 1) Department of Architecture & Regional Planning

- **M. Arch** [Urban Design, Landscape Architecture, Interior Design, Conservation, Inclusive/Agefriendly Designs, Traditional Designs and Knowledge],
- **B. Arch + M. Des/M. Arch** (Product Design, Sustainable Design, Visual Design, Product manufacturing, Design Theory),

**Physical Planning** [Sustainable Urban Planning, Housing, Transportation]; **Socio-Economic & Regional Planning** [GIS & Remote Sensing, Econometrics, Planning Statistics].

**M. Arch** (Parametric Design, AI, ML, Sustainable Habitats, Energy Auditing, Net Zero buildings, Systems Architecture, Steel Structures, Project Management)

#### 2) Ranbir and Chitra Gupta School of Infrastructure Design and Management

Sustainable Habitat Design, Net zero Building, Building Energy Systems, Energy Auditing,

Sustainable Habitats, Housing Infrastructure Planning and Design, Building Information Management, Construction Project Management,

Environmental Management, Remote Sensing and GIS, Water Infrastructure, Disaster Management, Waste management and Circular Economy, Urban Transport Management,

Infrastructure Monitoring and Management and Utilities Infrastructure Design.

#### **FACULTY OF SCIENCES**

# 1) Department of Chemistry

Inorganic synthesis: metalloporphyrin, cluster and cages, nanomaterials; inorganic photochemistry, bioinorganic chemistry, materials chemistry. Peptides and peptidomimetics, metabolomics, organic materials; enzyme/DNA-RNA based catalysis. Experimental biophysical chemistry and resonance spectroscopy; theoretical reaction dynamics.

# 2) Department of Geology and Geophysics

**Professor:** 3-D Seismic tomography

**Associate Professor:** Remote Sensing and GIS, High temperature/pressure Mineral Physics, Sedimentology/Sequence stratigraphy/stable isotope geochemistry, Electrical & EM geophysics.

**Assistant Professor:** Metamorphic Petrology, Sedimentology/Sequence stratigraphy, Coal/ Petroleum/Basin analysis, Ore geology, Stable Isotope Geochemistry.

Nuclear geophysics, Magnetotelluric (MT) Electromagnetic geophysics, Satellite/Airborne/Drone based geophysics, Mathematical modeling using numerical methods for small and large scale geophysical problems, Seismic method, Gravity and magnetic methods.

Remote Sensing and GIS/Geomorphology/Neotectonics

Groundwater geophysics

#### 3) Department of Mathematics

Professor: Complex Analysis, Fluid Dynamics, Partial Differential Equations, Theoretical Computer Science.

Assistant and Associate Professor: Artificial Intelligence, Algorithms, Coding & Information Theory, Formal Methods, Machine Learning, Operating System, Computer Architecture, Data Science & Big Data Analysis, Functional Analysis, Topology & Geometry, Mathematical Finance, Number Theory, Partial Differential Equations, Scientific Computing, Numerical Analysis, Probability & Statistics.

#### 4) Department of Physics

Condensed Matter Physics, Devices and Related Technologies; Nuclear Physics; High Energy Physics; Astrophysics, Gravitation & Cosmology; Physics of Fluids; Statistical Physics; Soft Matter; Nonlinear Physics; Atomic and Molecular Physics; Optics & Photonics; Quantum Computation, Information and Technology; Mathematical Physics.

# **FACULTY OF HUMANITIES, SOCIAL & ECONOMIC SCIENCES**

# 1) Department of Humanities & Social Sciences

Economics; English [Communication Studies, Language Teaching]; Philosophy [Logic, Business Ethics]; Sociology; Psychology [Industrial, Organizational, Health, Positive, Cognitive, Applied Psychology]; Management [HR, Strategy, Operations, Marketing, Analytics]; Foreign Languages [French, German].

#### 2) Centre for Rural Development and Innovative Sustainable Technology

PhD in Economics, Anthropology, Agricultural Engineering, Agricultural Economics

#### **FACULTY OF INTERDISCIPLINARY SCIENCES & ENGINEERING**

# 1) Department of Industrial & Systems Engineering

Industrial Engineering; System Engineering; Operations Research; Production and Operations Managements; Supply Chain Managements; Manufacturing System; System Dynamic and Simulation; Engineering Ergonomics and Human Factors; Safety Engineering and Analytics; Healthcare Systems Engineering Product; Design and Life Cycle Management; Quality Engineering; Information Systems and E-business; Data Analytics.

# 2) Materials Science Centre

Polymer Rheology and processing; Ceramic Engineering [B. Tech. with specialization in Structural Ceramics].

# 3) Centre of Excellence on Safety Engineering & Analytics (CoE-SEA)

Safety engineering & management; Safety analytics; Prevention through design (PtD); Probabilistic risk assessment & uncertainty analysis; Ergonomics & human factors; Human error; behaviour& human reliability analysis; Occupational health; Injury epidemiology; Safety Economics; Industrial/ Mine/ Chemical process/ transportation/ Construction/ Infrastructure/ Agricultural/ Manufacturing & machinery/ Electrical/ Fire Safety; Cyber-physical systems safety & security; disaster management, Application of data analytics, virtual & augmented reality, IoT, AI, ML, human sensing technologies and other Industry 4.0/5.0 technologies & techniques in safety.

# 4) Centre of Excellence for Indian Knowledge Systems [CoE-IKS]

Sanskrit and Natural Language Processing; other languages of India(Language sciences); Ganita, Jyamiti, Bijaganita, Samkhyavishleshantathya(Mathematics, Geometry, Algebra, and Computational sciences); SthapatyaVastuVidya, NirmanVidya and ParibeshaVidya (Built-environmental sciences); Nandantathya and Shilpa Shastra (Aesthetics and Design Sciences); ArthaShastra andNyaya Shastra (Economics and Ethical Social sciences); Domains of AYUSH(Ayurveda, Yoga, Unani, Siddha, Homeopathy); Rasayana and BhautikaVidya(Chemical and Physical sciences); Darshan and MahajagatikaVidya (Cosmology, Cosmogony and Astronomical sciences).

#### 5) Cryogenic Engineering Centre

Quantum Materials, Applied Superconductivity, Ultra Low Temperature Techniques; Cryogenic Processes & Equipments: Liquefaction, Refrigeration, Storage & Transfer

#### 6) Deysarkar Center of Excellence in Petroleum Engineering

Enhanced Oil Recovery, Petrophysics, Petroleum Geoscience, Reservoir Characterization, Well logging, Drilling and Hydrofracking, Reservoir Engineering and Simulations, Geothermal Energy, Carbon Capture, Sequestration and Storage.

#### 7) Rajendra Mishra School of Engineering Entrepreneurship (RMSoEE)

Ph.D. in any branch of Science, Engineering, Economics and Management preferably having a bachelor's degree in engineering or science domains with knowledge and knowhow of product development and innovation to support the following areas:

Entrepreneurship: Entrepreneurship development and ecosystem; Start-up or venture creation; social entrepreneurship; Entrepreneurial finance and economics; Growth and Sustainability of enterprises; Entrepreneurial leadership; legal aspects including IPR, marketing management for start-ups, human resources management, Entrepreneurial ecosystem development including incubation, acceleration and funding.

Product Engineering and Innovation: Design Thinking; Product Development; Intelligent Manufacturing; Innovation management and diffusion;

Sectoral Technological Modelling and Development: Energy and Clean Technology; Smart-grid; Healthcare, Entrepreneurship; Bio-innovation; Rural Technology; Waste Management; Data Analytics & Modelling.

Innovative Product development based on Artificial Intelligence and Machine Learning, Robotics, Electronics and devices, Biomedical devices and personal products, construction technologies, interdisciplinary systems for agriculture, education, cyber physical systems – including robotics, telecommunication, intelligent systems in automotive electronics etc.

Successful candidates are expected to support and provide academic and research support in Innovation and Entrepreneurship to compatible disciplines the institute is involved with.

# 8) School of Nano Science and Technology

Nanofabrication / Nanoelectronic and Photonic Devices / NEMS / Nanosensors; Bulk nanostructured materials for structural applications; Novel nanomaterials: Synthesis, self-assembly and applications; Nanostructured coatings for energy conversion/storage and surface engineering; Nano-biotechnology; Computational nanostructures

# 9) Advance Technology Development Centre

MEMS based sensors and Actuators; Integrated Photonics; VLSI and System on Chip (SoC); Mobile Computing for CPS/IoT, Edge/Fog/Cloud Computing for CPS/IoT; AI and ML for CPS, Speech; Image and Signal processing; Robotics & Automated Systems; Augmented Reality/Virtual Reality/Mixed Reality.

# 10) Partha Ghosh Academy of Leadership

Ph.D. in any branch of Science, Engineering, Economics and Management preferably having a bachelor's degree in engineering or science domains with knowledge and knowhow of Leadership; Public Leadership and Innovation; Ethical and Etiquette Leadership; Organizational Leadership; Vedic Leadership; Professional Leadership and Ethics; Transformational Leadership; Communication & Entrepreneurial Leadership; Strategic Leadership;

# SCHOOL OF MANAGEMENT

#### 1) Vinod Gupta School of Management

Marketing Management: Marketing Analytics, International Marketing, B2B Marketing, Sales and Distribution, Retail Marketing, Digital Marketing. Human Resource Management and Organizational Behavior: HR Analytics, Labor Relations. Finance and Accounting: Quantitative Finance, Accounting Analytics, Banking, and Corporate Accounting, Financial Technologies (FinTech), Actuarial Modeling, Entrepreneurial Finance. Economics. Business Analytics, Information systems.

#### **SCHOOL OF LAW**

# 1) Rajiv Gandhi School of Intellectual Property Law

Tax Law, Labour & Industrial Law, ICT & Automation Law, Corporate Law, Public Law, Criminal and Procedural Law, Intellectual Property Law