



Advertisement No: AU/R&D/PhD/Adm/112023-WNTR.

Date: 22<sup>nd</sup> November 2023

## PhD Admission Winter Session 2023-24 at Adamas University

### **Apply by 30<sup>th</sup> December - 2023**

A constant endeavour towards innovation coupled with a powerful spirit of research has been the hallmark of Adamas University since its inception. With a robust infrastructure and a strong/powerful research orientation, Adamas University is all set to offer Ph.D. programme in the areas of Basic & Applied Sciences / Engineering & Technology / Humanities & Social Sciences / Law / Management/Education.

As per the UGC guidelines 2016 and its amendment 2022, the academic programme leading to the Ph.D. degree at Adamas University involves a course work program (one semester) followed by a research project leading to thesis submission. Adamas University also actively encourages research in interdisciplinary areas through a system of joint supervision and interdepartmental group activities. The University also undertakes sponsored research and development projects from industrial and other organizations in public as well as private sectors.

### **List of PhD Program (s) running under Adamas University:**

<b>Discipline</b>	<b>Field of Specialization (s)</b>
Mechanical Engineering	Vibration, MEMS, Piezoelectric Materials
Electrical Engineering	Control system analysis and identification
Civil Engineering	Concrete & Construction Technology Innovative & Sustainable Building Materials Rubberized Concrete Composites Geopolymer Concrete Construction Management Nanomaterials and its Application Waste Water Treatment using Membrane Technology Removal of Decontamination of Arsenic and Fluoride from Ground Water Waste Management
Electronics & Communication Engineering	MEMS, NEMS, Devices, Bio-Medical Electronics, Nano Technology and sensors, Signal and Image Processing, Pattern Classification, Gesture Recognition
Computer Science & Engineering	Formal Methods, Symbolic Logic, Application of MI/AI Cloud base infrastructure, Nano communication networks, 5G wireless, network and IoT, Information centric networks, Quantum, Dot Cellular Automata (Nano Computing)
Physics	Condensed matter physics, Electronics, Solid-state physics & electronics, High-energy Physics, LASER & Fiber optics
Chemistry	Physical chemistry, organic & inorganic chemistry, material science, nano-science, environmental chemistry, industrial chemistry

Mathematics	Hydrodynamics and Analytical/Numerical Modeling solute transport in geological formations, Mathematical Modelling of Biosciences, Fuzzy Set Theory, Multi-criteria Decision Making, Abstract Algebra, Module theory and Number Theory, Production inventory and supply chain management, Data mining and machine learning, Ocean data analysis, numerical/statistical modeling and forecasting, Thermoelasticity, Numerical Methods in Finance,
Geography	Urban Geography and Environmental Geography Hydrology and Disaster Management, Medical Geography and Social Geography, Water Resource Management and Fluvial Geomorphology
Psychology	Clinical psychology, Cognitive psychology, Social psychology, Forensic psychology, Counseling psychology
Biotechnology	Infectious diseases, Environmental Biotechnology, Nutraceuticals and its application.
Microbiology	Mechanism of biofilm formation in enteric pathogens, Strategies Against Antimicrobial Resistance
Biochemistry	Cancer, RNA Biology, Haematopoiesis, Plant Biochemistry, Plant Molecular Biology, Antioxidant and medicinal chemicals, Free radical biology.
Media, Communication & Fashion	Journalism, Advertising, Film Studies, New Media, Media & Communication
Bengali	Language, Poetry, Society, Novels
English	Comparative Literature, Dalit Study, Children literature, Environmental literature
History	Colonial Bengal, History of Medicine, Folk & Tribal Culture, Ancient Indian History
Political Science	International relations & diplomacy, Governance
Sociology	Ageing, politics, culture, urban sociology, clinical sociology, ethnicity and race
Law	Business law, Environmental Law, Arbitration, Information Technology Law, Family Law, Intellectual Property Law, Procedural Law and Substantive Law.
Economics	General economics, Transport economics, finance, market, macro & micro economics, agriculture economics, socio-economics
Commerce	Accounting, Finance, Marketing
Management	Marketing/General Management, Human Resource Management, Finance
Education	Psychology of Education, History of Education, Women Education, Inclusive Education, Special Education, Music in Education, Creativity in Education
Pharmacy	Pharmacology, Pharmaceutics, Pharmaceutical Chemistry, Pharmaceutical Analysis
Environmental Science	Sustainable Technology, Climate Change, Water, Health

**PhD Vacancy List : Summer Session: 2023-24 Academic Year**

Sl. No	PhD Program	PhD Seat Vacancy (UR)	Area of Specialization
1	Microbiology	03	Mechanism of biofilm formation in enteric pathogens, Strategies Against Antimicrobial Resistance
2	Biochemistry	02	Cancer, RNA Biology, Haematopoiesis, Plant Biochemistry, Plant Molecular Biology, Antioxidant and medicinal chemicals, Free radical biology.
3	Biotechnology	05	Infectious diseases Environmental Biotechnology, Nutraceuticals and its application
4	Electronics & Communication Engineering	04	Signal and Image Processing, Pattern Classification, Gesture Recognition, MEMS, NEMS, Devices, Nano Technology and sensors
5	Computer Science & Engineering	04	AI, Biomedical , 5G communication, IoT, Application in Biotechnology, Deep Learning, Blockchain, Cloud Computing, Network Security
6	Mechanical Engineering	03	Vibration, MEMS, Piezoelectric Materials
7	Mathematics	03	Hydrodynamics and Analytical/Numerical Modeling solute transport in geological formations, Mathematical Modelling of Biosciences, Fuzzy Set Theory, Multi-criteria Decision Making, Abstract Algebra, Module theory and Number Theory, Production inventory and supply chain management, Data mining and machine learning, Ocean data analysis, numerical/statistical modeling and forecasting, Thermoelasticity, Numerical Methods in Finance,
8	Physics	03	Condensed matter physics, Electronics, Solid-state physics & electronics, High-energy Physics, LASER & Fiber optics Quantum transport, Spintronics, Up converting nanoparticle based optical sensing or Localized Surface plasmon resonance-based bio-sensing Bio-medical instruments, Nano-bio electronics, bio-medical imaging, AI, IoHT
9	Chemistry	03	Metal Organic Framework, Photophysical Study of Nano Material,
10	Geography	03	Urban Geography and Environmental Geography Hydrology and Disaster Management Medical Geography and Social Geography Water Resource Management and Fluvial Geomorphology
11	Commerce	02	Accounting, Finance, Marketing

12	Management	02	Finance, Marketing & strategy, HR & OB, Data Analytics
13	Journalism / Communication Management	02	Film study, Advertising, Journalism and Communication
14	Civil Engineering	02	Concrete & Construction Technology Innovative & Sustainable Building Materials Rubberized Concrete Composites Geopolymer Concrete Construction Management Nanomaterials and its Application Waste Water Treatment using Membrane Technology Removal of Decontamination of Arsenic and Fluoride from Ground Water Waste Management
15	Sociology	02	Ageing, rural urban development, community development, politics, culture, urban sociology, clinical sociology, ethnicity and race
16	History	02	Colonial Bengal, History of Medicine, Folk & Tribal Culture, Ancient Indian History
17	Bengali	02	Language, Poetry, Society, Novels
18	English	03	Comparative Literature, Dalit Study, Children literature, Environmental literature
19	Pharmacy	04	Pharmacology, Pharmaceutics, Pharmaceutical Chemistry, Pharmaceutical Analysis
20	Political Science	02	International relations & diplomacy, Governance

#### **WRITTEN EXAMINATION AND INTERVIEW:**

*The Examination will be conducted online.*

- *The Examination will start from 11:00 a.m..*
- *The Examination will be for Two hours duration.*
- *The Examination will test candidates' General Research Aptitude and Core Knowledge in the relevant discipline.*
- *The candidates, who qualify the RET examination are eligible to appear for the Interview, and accordingly only the qualified candidates will be intimated through E-mail communication.*

**Note: -Candidates who have qualified in UGC NET / CSIR (JRF) Examination / SLET / GATE or it's equivalent examinations are exempted from appearing in the written admission test.**

#### **Eligibility**

Qualifying Degree: Master's or equivalent degree in the relevant branch (or allied subjects).

All candidates seeking admission to the PhD program shall have to possess the requisite marks / grades in qualifying examination as indicated below:

Master's Degree or equivalent as approved by Association of Indian Universities (AIU) in Arts, Science, Commerce, Engineering, Technology or any other discipline.

Graduate in Professional courses recognized by law, such as, Medical, Law, Chartered Accountancy, Cost Accountancy, Company Secretary, etc. with good academic record and having aptitude for research.

The qualifying marks for Social Science /Humanity is 55% in PG level and for others 60% or equivalent grade in PG level.

**Filled in application form (download from web-site) with supporting documents (certificates, mark-sheets, NET / GATE or equivalent qualification proof / certificate) and on-line application fees submission receipt/proof are to be submitted to the PhD Cell at the time of the final admission.**

Address for Communication:

To  
The Dean (R&D)  
The Office of the Research & Development  
Adamas University  
Barasat – Barrackpore Road  
Jagannathpur, 24 Parganas (North),  
Kolkata - 700 126,  
West Bengal, India

**N.B.** *The Vacancy List is tentative. The University may, at its sole discretion, modify the above-stated guidelines of entrance, vacancy list and eligibility criteria, with or without notice to the applicant. Any such modification will be effective immediately upon public posting. The continuance of the applicant in proceeding with application, following any such modification, constitutes the applicant's acceptance of these modified terms. The admission is liable to be cancelled, in case if any dispute /mismatch of the information is found, at any point of time during the Ph.D. Programme.*

S/d

Date: 22<sup>nd</sup> November 2023

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Dean (Research & Development)  
Adamas University  
Kolkata 700126