

No: AU/R&D/PhD/Adm/062021-22-SUMR

PhD Admission Summer Semester 2021-22 at Adamas University

Apply by 10th June - 2021

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 amendments, 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:

| Discipline | Field of Specialization (s) | | |
|---|---|--|--|
| 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, Bio-physics, Solid-state physics & electronics, High-energy Physics, LASER & Fiber optics | | |
| Medical Physics & Instrumentation | Bio-medical instruments, Nano-bio electronics, bio-medical imaging, AI, IoHT | | |
| 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 | | |

IMPORTANT DATES

Issue of application forms: 07.05.2021Last date for receipt of complete application:10.06.2021RET Entrance Examination:19.06.2021

Interview: :23.6.2021 & 24.6.2021

Declaration of Result (Tentative) : 30.06.2021

Date of Joining (Tentative) : 12.07.2021

Induction Program : 16.7.2021 & 17.07.2021

PhD Vacancy List: Summer Session; 2021-22 Academic Year

| Sl. No | PhD Program | PhD Seat Vacancy (UR) | Area of Specialization |
|--------|---|-----------------------------|---|
| 1 | Microbiology | 05 | 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 | 03 | Infectious diseases Environmental Biotechnology, Nutraceuticals and its application |
| 4 | Mechanical Engineering | 02 | Vibrations; Smart Materials; Micro-electromechanical Systems (MEMS); Biomedical Applications |
| 5 | Civil Engineering | 02 | Concrete & Construction Technology, Innovative & Sustainable Building Materials, Rubberized Concrete Composites, Geopolymer Concrete, Construction Management, Waste Management, Nanomaterials and its Application, Waste Water Treatment using Membrane Technology, Removal of Decontamination of Arsenic and Fluoride from Ground Water, Waste Management |
| 6 | Electrical Engineering | 02 | All relevant domain |
| 7 | Electronics & Communication Engineering | 03 | Signal and Image Processing, Pattern Classification, Gesture Recognition, MEMS, NEMS, Devices, Nano Technology and sensors |
| 8 | Computer Science & Engineering | 02 | AI, Biomedical , 5G communication, IoT, Application in Biotechnology, Deep Learning. |
| 9 | Mathematics | 07 | 1. Hydrodynamics and analytical/numerical modeling of solute transport in geological formations 2. Sediment transport modeling 3. Numerical/statistical ocean modeling and forecasting 4. Ocean data analysis 5. Mathematical modelling of biosciences 6. Numerical methods in finance 7. Fuzzy set theory 8. Multi-criteria decision making 9. Optimization 10. Operations research 11. Production inventory and supply chain management 12. Matrix theory 13. Combinatorial matrix theory 14. Data mining and machine learning 15. Quantile function based statistical modeling 16. Distribution theory 17. Regression analysis 18. Abstract algebra 19. Module theory 20. Number theory 21. Topology 22. Ideal convergence 23. Functional analysis 24. Fixed point theory 25. Thermoelasticity |

| 10 | i) Physics ii) Medical Physics & Instrumentation | 05 | Material Science, Condensed Matter Physics Bio-Physics, Medical Physics & Instrumentation Photonics/Optoelectronics |
|----|--|----|---|
| 11 | Chemistry | 01 | Nano-Science and Spectroscopy |
| 12 | Psychology | 06 | Industrial Psychology & OB Clinical Psychology, Positive Psychology Cognitive Psychology, Rehabilitation Psychology Social Psychology, School Psychology |
| 13 | Sociology | 01 | Sociology of Religion |
| 14 | Political Science | 03 | International Relations and South Asian Politics |
| 15 | Management | 05 | Finance, Marketing & strategy, HR & OB, Data Analytics |
| 16 | Commerce | 04 | Accounting, Finance, Marketing |
| 17 | Education | 02 | Psychology of Education, Environmental Education, Guidance & Counselling and Measurement & Evaluation in Education Women Education, Inclusive Education, Special Education History of Education, Philosophy of Education, Psychology of Education, History of Education, Women Education and Teacher Education, Health & Physical Education, Sports in Education, Music in Education, Creativity in Education |
| 18 | Journalism / Communication Management/ Entertainment Media | 05 | Advertising, Development Communication, Film Studies, Journalism, Journalism, Cultural Studies, Film Studies, Global & Indian Media |
| 19 | History | 03 | Environmental History; History of Science and Technology Social and Economic History; Religious History History of Religion; Epic Studies; Buddhist Studies; Lega History; Regional Archaeology. |
| 20 | English | 08 | Postcolonial Literature, Indian English Literature Migration Studies, Partition Literature Dalit Literature, Film Studies (Bengali) Semantics, Cognitive Linguistics Queer Studies, Comparative Literature Children's Literature, African American Literature American Literature, African Literature Indian Classical Literature, Translation Studies |
| 21 | Bengali | 02 | Poetry and Katha Sahityo |

WRITTEN EXAMINATION AND INTERVIEW:

The Examination will be conducted online.

- The Examination will start from 11:00 a.m.
- The Examination will be of **Two hours** duration.
- The Examination will test candidates' <u>General Research Aptitude</u> and <u>Core Knowledge</u> in the relevant discipline.
- The candidates, who qualify the RET examination are eligible to appear in the Interview, and accordingly the qualified candidates will be intimated for appearing in the interview.

Note: -Candidates who have qualified in UGC NET / CSIR (JRF) Examination / SLET / GATE are exempted from the RET examination (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 online application fees submission receipt/proof are to be sent in a sealed envelope to the following address on or before 10^{th} June, 2021 (5:00 PM):

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

E-mail: office_rd@adamasuniversity.ac.in

N.B. Considering the unpredictability of the present time, the University may, at its sole discretion, modify the above-stated guidelines of entrance, vacancy list and eligibility, 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& conditions.

S/d
Date: 7th May -2021

Dean (Research & Development)
Adamas University, Kolkata 700126