BML Munjal University
Ph.D. ADMISSION BROCHURE

BML Munjal University (BMU) invites applications for admission to Ph.D. programs in the following schools:

- School of Engineering and Technology (SOET)
- School of Management (SOM)
- School of Law (SOL)

Founded by the Hero Group, BMU is a not-for-profit initiative offering undergraduate, postgraduate, and doctoral programmes. BMU seeks to transform higher education in India by creating a world-class and innovative teaching, learning, and research environment. The university accommodates four schools: Engineering & Technology, Management, Law, and Liberal Studies. As part of its research initiative, the university seeks to create opportunities to carry out important simulations, experiments, and characterizations within the campus premises. With strong industry sponsored research laboratories, state of the art incubation centres, excellent infrastructure, collaboration with industries and research organisations within and outside India and a highly qualified faculty, the university aspires to transform the society by pursuing research-led, innovative and practical solutions. Keeping this in mind, the university invites Ph.D. applications from motivated and interested students.

Welcome note by the Dean-Research and Development Cell
"BML Munjal University offers Doctoral Programmes through various schools. The university is firmly committed to excellence in the respective domains of research and teaching. Towards this objective, BMU's doctoral program has been carefully designed to provide the required foundations for a research-intensive career in the respective specialisations. The active collaborations of BMU with industries and universities of international repute, add substantial value to the doctoral research at the University. We extend a warm welcome to the aspiring doctoral candidates. We are certain that you will find it exciting and fulfilling as you embark on this exploratory journey and achievements in the domain you choose to work in."

Broad Research Areas:
Applied Sciences: Fluid mechanics, Mathematical modelling, AI/ML, Soft computing, Science of science, Data science, Computational fluid dynamics, Nanofluids, Heat and mass transfer, Nonlinear dynamics and Chaos synchronisation, Computation applied mathematics, Complex network, Hydrodynamic stability, Data analysis, Computational chemistry, computational materials science and engineering: machine learning, Molecular dynamics, Theory and simulation of molecules and nanomaterials, Molecular informatics, Soft matter and biophysics, Interdisciplinary computational biology, Photo-electro-catalysis for energy and environment, Characterization of conducting

polymers, Quantum chemistry, Molecular spectroscopy, Organic electronics, Optoelectronics, Quantum nanoelectronics, Neuromorphic devices, Oxide electronics, Energy storage (Li-Ion batteries, Supercapacitors), Transparent electronics, Experimental condensed matter physics, Materials science, Nanostructures, Quantum material, Surface science, Devices, Alloys, Surface and interface physics, Magnetic thin films and multilayers, Experimental condensed matter physics, Thin films, Nanomaterials, Chemical and gas sensors, Micro and nanofabrication, Sensor devices and sensor array/electronic nose.

Computer Science and Engineering: Natural language processing, Machine learning, Data science, Network science, Science of science, Scientometrics, Computational social science, Bibliometrics, Computer vision, Image processing, Applied machine learning and deep learning, Artificial intelligence, Generative AI, Image processing, Biomarker discovery, Signal processing, Data science for biomedical applications, User experience research, Econophysics, Complex systems, AI in law, Pattern recognition, Deep learning, Data mining, Pattern recognition, Antenna engineering, Internet of things, Fuzzy theory/neutrosophic sets, Optimization/Nature inspired algorithms, Software engineering, Multilingual text recognition, Cyber security, Fog computing, WSN's, Energy efficiency, Information retrieval, Biomedical data mining, Soft computing techniques.

Electronics and Communication Engineering: Vacuum nanoelectronics devices (Growth and study of nanocarbon based materials for various nanoelectronics applications), VLSI systems design using hardware design language, Verilog, Healthcare management solutions, Power electronics and drives, Electric vehicle, Mathematical modelling, Renewable energy systems, VLSI design, Low power VLSI, Test and verification and security.

Mechanical Engineering: Tribology, Hardfaced coatings, Materials behaviour, Computational fluid dynamics in areas of fluid, thermal, and manufacturing, Biomedical devices, Turbulent flows, Drag reduction, Biomechanics, Composites, Finite element Modelling of nanocomposites, Microcomposites, Metal matrix Composites, Microstructural modelling and analysis, Production planning, Supply chain management, Industrial engineering, I4.O, Electric vehicles, Telematics, Autonomous vehicles, Product architecture, Product platforming, Innovation, Automobile design methodology, Vehicle dynamics, Applied-artificial intelligence in materials science and engineering, High-entropy-alloys, Aluminium recycling, Solidification processing (casting), Metallurgy.

Management: Economics and public policy, Finance and accounting, Information system and business analytics, Marketing and sales, Operations research and management, Organisational behaviour and HRM, Strategic management, Management in developing sector, Innovation and entrepreneurship, Corporate social responsibility and sustainability.

Law: Legal theory and philosophy, Political philosophy, Constitutional law, Comparative constitutional law, Comparative law, Constitutional theory, Law and economics, Competition law, Telecommunication law, Data protection law, Environmental law, Climate change law, Criminal law, Public International law, Human rights law, Legal history, Law and regulation.

(Note: The University welcomes research topics that are interdisciplinary, transdisciplinary, and translational.)

Details of Ph.D. admissions

Applications are invited for admission into Doctoral Programmes (Ph.D.) across various schools of the university. All relevant details of Ph.D. admissions are provided in this section.

HOW TO APPLY: Application forms should be submitted **ONLINE** only (**CLICK HERE**)

Please visit the website, https://www.bmu.edu.in/courses/ph-d/ for details regarding:

1. Eligibility criteria
2. Categories of Research Candidates

3. Fee Structure
4. University Scholarship/ Fellowship
5. Professional Development Grant
6. Details of online written test
7. Admission Procedure

Note: In this cycle, a maximum of 20 Ph.D. seats will be funded by the University. The university may not fill all the seats if suitable candidates are not found. The committee's decision in this regard is final and binding.

For further queries, please email: **phdadmission@bmu.edu.in**

Important dates:

Last date of filling online application form	30 April 2025