ADMISSION **CRITERIA**

Admission is purely merit-based and rests on the following criteria:

MS & PHD PROGRAMMES

- Academic Record
- Performance in Admission Tests
- Research Statement (only for PhD applicants)
- Online Application Submission
- Online Submission of Supporting Documents and Fee Payment
- Letters of Recommendation (only for PhD applicants)
- Application Review
- Interview Performance (if shortlisted)

Note: These are the minimum criteria applicants must fulfil to be eligible to apply. Meeting these criteria does not guarantee admission to LUMS.

PHD ADMISSION CRITERIA **FOR FOREIGN NATIONALS**

The following criteria applies to all foreign applicants:

- Academic Record
- Research Background
- Letters of Recommendation
- Online Application Submission
- Online Submission of Supporting Documents
- Application Review
- Online Test and Interview Performance (if shortlisted)

To study at LUMS, foreign nationals must follow requirements such as obtaining a visa and a no-objection certificate from Pakistani authorities. LUMS will assist in this process.

Scan for more information on MS Mathematics

Scan for more information on PhD Mathematics

AMMARA RASHID
PhD Mathematics Student

" Being part of the PhD Mathematics programme at LUMS has been an inspiring and transformative experience. The mathematics department stands out for its vibrant academic culture, driven by passionate faculty who are supportive and approachable. The department provides various resources, from insightful seminars and research talks to engaging competitions, which enrich the learning environment. As I continue my journey here, I am confident that the knowledge and skills I acquire will empower me to contribute meaningfully to both academia and society, using mathematics to address real-world challenges. "

FINANCIAL **SUPPORT**

- Full funding of the MS programme which includes a full tuition fee waiver, free hostel accommodation, a monthly stipend for 2 years as per University policy, and air travel (for international students) under the LUMS-IMM Scholarship
- Fully-funded scholarship for PhD which covers admission, tuition, semester registration fees, and a monthly stipend subject to the supervisor's approval for 4 years
- Options to work as Research or Teaching Assistants (subject to availability)
- External scholarships (support and eligibility for these vary depending on the donor)

LUMS
A Not-for-Profit University

Learning *Without* Borders

MS & PHD MATHEMATICS
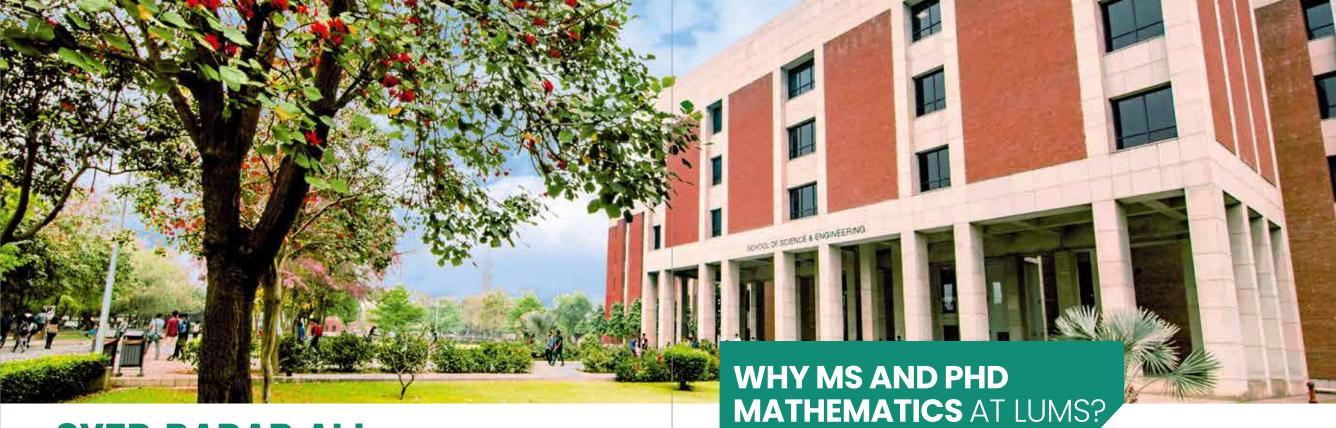

MAKE YOUR *IMPACT*

SYED BABAR ALI
SCHOOL OF SCIENCE AND ENGINEERING

SYED BABAR ALI SCHOOL OF SCIENCE AND ENGINEERING

Founded in 1985 as a not-for-profit, LUMS has pioneered innovative educational trends. The expanse of research and teaching at LUMS offers its community 'Learning Without Borders' by breaking academic, geographic, and socio-economic barriers to enhance students' academic exposure and make education accessible to all.

The Syed Babar Ali School of Science and Engineering (SBASSE) at LUMS is at the forefront of research and teaching in Pakistan. The MS programmes at SBASSE are rigorous and designed to impart specialised professional and research-oriented training to students. All SBASSE departments offer at least two options to choose from: MS-by-Coursework or MS-by-Thesis. The School's PhD programmes prepare students to think scientifically and conduct high-quality research independently. Major milestones that must be achieved for the successful completion of the PhD degree include the Coursework, Comprehensive (Qualifying) Examination, Thesis Proposal Defense, at least one peer-reviewed journal article, and PhD Thesis Defense.

WHY MS AND PHD MATHEMATICS AT LUMS?

LUMS AND SBASSE FOSTER A DYNAMIC LEARNING ENVIRONMENT

QS WORLD UNIVERSITY RANKINGS BY SUBJECT

- #401–450
  Computer Science and Information Systems
- #351–400
  Engineering – Electrical and Electronics
- #401–450
  Engineering and Technology

The Department of Mathematics comprises faculty members, students, and research fellows studying and working across all fields within mathematics, ranging from algebraic topology to the mechanics of environment systems. The Department is dedicated to conducting research in pure as well as applied mathematics. Students have the opportunity to choose from many options, and tailor the programme to individual interests and requirements.

MS MATHEMATICS IN PARTNERSHIP WITH ICTP, ITALY

The Department of Mathematics, in collaboration with the International Centre for Theoretical Physics (ICTP), Italy offers the International Mathematics Masters (IMM) programme at SBASSE. This prestigious two-year degree is designed to provide a pragmatic and research-focused education, featuring:

- Opportunities for short-term research visits for students in leading research institutes
- High-calibre faculty and visiting professors from leading institutions engaged in team teaching and joint supervision
- Selected students will be eligible for full fee waiver, free hostel stay, monthly stipend for two years, as well as air travel (for international students)
- Rigorous coursework on modern mathematics combined with cutting-edge research
- Recruitment of top local and international students

Note: All students are required to be a Teaching Assistant for at least two courses during their study.

RESEARCH PROJECTS

The research interests of faculty at the Department of Mathematics include areas of Pure, Applied, and Computational Mathematics. The Department welcomes interdisciplinary and cross-disciplinary research. A PhD applicant is required to carefully select one of the available faculty advisors based on their background and interest in the prospective advisor's research area:

- **SYMMETRIES OF DIFFERENTIAL EQUATIONS**
  Dr. Imran Naeem
- **COMPUTATIONAL AND MATHEMATICAL BIOLOGY**
  Dr. Adnan Khan, Dr. Sultan Sial & Dr. Ali Ashher Zaidi
- **ENUMERATIVE COMBINATORIAL ALGEBRA**
  Dr. Imran Anwar & Dr. Shaheen Nazir
- **FINANCIAL MATHEMATICS**
  Dr. Adnan Khan & Dr. Sultan Sial
- **NUMERICAL METHODS, SCIENTIFIC COMPUTATION**
  Dr. Sultan Sial
- **COMMUTATIVE ALGEBRA, ALGEBRAIC GEOMETRY**
  Dr. Reza Abdolmaleki, Dr. Imran Anwar, Dr. Haniya Azam & Dr. Shaheen Nazir
- **ALGEBRAIC TOPOLOGY, APPLIED TOPOLOGY, HOMOLOGICAL MIRROR SYMMETRY**
  Dr. Haniya Azam

PHD MATHEMATICS

The PhD Mathematics programme at SBASSE is a full-time, four-year programme that:

- Recruits top local and international talent
- Provides four years of fully funded education
- Offers opportunities for additional funding for collaborative research and teaching
- Pays students a monthly stipend as per University policy
- Combines rigorous coursework on modern mathematics with cutting-edge research
- Gives opportunities for short-term research visits

Note: All students are required to be a Teaching Assistant for at least two courses during their study.