**ADMISSION** CRITERIA

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

### MS & PHD PROGRAMMES

- Academic Record
- Performance in Admission Test
- Application Review
- Submission of complete online application, application processing fee and supporting documents by the stipulated deadline
- Interview Performance (if needed/shortlisted)
- Letters of Recommendation
- Research Statement (only for PhD applicants)

Note: This is the minimum criteria that applicants need to fulfil in order to be eligible to apply. Fulfilment of this criteria does not guarantee admission to LUMS.

Scan for more information on MS Mathematics



# PHD ADMISSION CRITERIA FOR FOREIGN NATIONALS

### The following criteria applies to all foreign applicants:

- Academic Record
- Research Background
- Online Test and Interview (if shortlisted)
- Letters of Recommendation
- Application Review
- Submission of complete online application and supporting documents by the stipulated deadline

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. Additionally, foreign nationals from developing countries can also apply through The World Academy of Sciences and UNESCO portal (https://rb.gy/j83y7v).





## **MUGHEES GHAYAS** PHD MATHEMATICS '21

**66** The Department of Mathematics has excellent academic resources and the faculty is extremely friendly and approachable. The core courses requirement ensures that students are exposed to the fundamental ideas underlying various areas of mathematics. Moreover, the John Conway seminar series allows students to interact with foreign faculty and explore new areas. From a researcher's perspective, the advisors are very passionate and they motivate and challenge the students.??

# FINANCIAL SUPPORT

- Full funding of the MS programme, which includes a full fee waiver, free hostel stay, and a monthly stipend for 2 years
- Full funding of the PhD programme, which covers tuition, registration, admission fee, and a monthly stipend for 4 years
- External scholarships (support and eligibility for these scholarships vary depending on the donor)
- Options to work as Research or Teaching Assistants (subject to availability)



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#LearningWithoutBorders



# MATHEMATICS

Syed Babar Ali School of Science and Engineering

Scan for more information on PhD Mathematics







وہی جہاں ہے تیراجس کونو کرے پیدا

# **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.

Syed Babar Ali School of Science and Engineering (SBASSE) at LUMS is making significant strides in the experimentation of teaching and learning, and making impactful contributions to science and technology. The MS programmes at SBASSE are rigorous and designed to impart specialised professional and research-oriented training to students. All SBASSE departments offer 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.

### LUMS AND SBASSE FOSTER A DYNAMIC LEARNING ENVIRONMENT

### **QS WORLD UNIVERSITY RANKINGS BY SUBJECT**

#301-350

Computer Science and Information Systems

علامه اقبال

#401-450 Engineering and Technology

#351-400 Engineering – Electrical and Flectronics

#501-550 Physics and Astronomy

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), offers the International Mathematics Masters (IMM) programme at SBASSE. It is a prestigious, two-year degree based on pragmatics with the following features:

Opportunities for short-term research visits for students in leading esearch 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 cuttina-edae research

Upon completion, students will get the IMM certificate endorsed by the ICTP along with the Master's degree from LUMS

Recruitment of top local and international talented students

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





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		NL Dr.
<b>COMPUTATIONAL AND MATHEMATICAL BIOL</b> Dr. Adnan Khan, Dr. Sultan Sial & Dr. Ashher Zaidi		CC Dr.
<b>ENUMERATIVE COMBINATORIAL ALGEBRA</b> Dr. Imran Anwar & Dr. Shaheen Nazir		& [ AL
<b>FINANCIAL MATHEMATICS</b> Dr. Adnan Khan & Dr. Sultan Sial		HC Dr.
<b>OPERATOR THEORY</b> Dr. Masood Hussain Shah		
PHD MATHEMATICS		
The PhD Mathematics programme a the following features:	t SBASSI	Ξ is
Deerwite ten loogl and		



Provides four years of fully funded education



Offers opportunities for additional funding for collaborative research and teaching

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

JMERICAL METHODS, SCIENTIFIC COMPUTATION Sultan Sial

OMMUTATIVE ALGEBRA, ALGEBRAIC GEOMETRY Reza Abdolmaleki, Dr. Imran Anwar, Dr. Haniya Azam Dr. Shaheen Nazir

GEBRAIC TOPOLOGY, APPLIED TOPOLOGY, OMOLOGICAL MIRROR SYMMETRY . Haniya Azam

a full-time four-year programme with



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