

# **ADMISSION CRITERIA**

# 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 and Research Presentation (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 Electrical Engineering



## 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).

Scan for more information on PhD Electrical Engineering







Joining SBASSE was one of the best decisions of my life. It has a highly qualified and experienced faculty, friendly and helpful support staff, state-of-the-art facilities and a conducive environment for interdisciplinary research. The School presents a wonderful opportunity for conducting high-quality and impactful research, making LUMS one of the best institutions to pursue graduate studies in Pakistan.

# FINANCIAL SUPPORT

- Merit scholarships
- LUMS interest-free loan that covers partial to full tuition fee expense (only for local applicants)
- External scholarships (support and eligibility for these scholarships vary depending on the donor)
- Options to work as Research or Teaching Assistants (subject to availability)
- Full funding of the PhD, which covers tuition, registration, admission fee and a monthly stipend for 4 years



DHA, LAHORE CANTT. 54792, LAHORE, PAKISTAN © +92-42 111-11-LUMS (5867) Ext: 2177 □ admissions@lums.edu.pk
 □ www.lums.edu.pk









**LUMS** A Not-for-Profit University 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.

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

The Electrical Engineering (EE) department at LUMS offers an unparalleled experience, distinct from any other in Pakistan, with a focus on addressing inherently multidisciplinary and nuanced problems. The department's endeavours range from water informatics of the Indus Basin, crucial for Pakistan's sustainable water consumption, to a wide array of areas including electric vehicles, climate change, environmental issues, sustainable urban communities, robotics for agriculture, food safety technologies, and disease diagnostics.

The department's labs tackle challenges with significant societal and economic impact on Pakistan. Students receive meticulously structured training, empowering them to formulate research questions that transcend different fields and address real-world problems.

The EE department's commitment to impactful research has earned it a position among the top 400 globally in QS World University Rankings by Subject. By joining EE graduate programmes, you will have the opportunity to contribute to transformative work that shapes the future of technology and addresses critical issues in society.

# MS AND PHD ELECTRICAL ENGINEERING

The programmes offered by the Department of Electrical Engineering are rigorous and designed to impart specialised professional and research-oriented training. The department aims to:

- Produce graduates with attributes essential for leadership in industry and academic institutions, such as independence of thought, environmental and social responsibility, professional and ethical outlook, and a strong interdisciplinary foundation built on fundamental scientific principles.
- Achieve excellence in cutting-edge research by winning competitive grants and awards, creating and disseminating knowledge at globally recognised forums, and generating intellectual property.
- Positively impact society by translating engineering knowledge into solutions for locally relevant problems and enabling entrepreneurship initiatives with a global footprint.





The Department of Electrical Engineering has gradually grown to 21 full-time PhD faculty members who teach and direct research. MS & PhD Electrical Engineering comprises of the following themes mapped over different labs/clusters:

### DATA (AI HARDWARE AND THEORETICAL FOUNDATIONS)

- Electronics and Embedded Systems Lab
- Smart Data, Systems, and Applications (SDSA) Lab and Signal, Image and Video Lab
- Advanced Communications (AdCom) Research Lab
- Cyber Physical Networks (CyPhyNet) Lab
- Clinical and Translational Imaging Lab
- Networks and Communications Lab

### LIFE (BIOMEDICAL DEVICES AND POINT-OF-CARE HEALTHCARE)

- Bio-Aari Photonics Lab
- Clinical and Translational Imaging Lab and Signal, Image and Video Lab
- Semiconductor and Nanoelectronics Devices Lab

### SUSTAINABILITY (SYSTEMS VIEW OF THE WATER-ENERGY-FOOD NEXUS)

- Advanced Communications (AdCom) Research Lab
- Energy and Power Systems Lab
- Centre for Water Informatics and Technology (WIT) and CyPhyNet Lab
- Semiconductor and Nanoelectronics Devices Lab