



# WHY LUMS?

#### **WORLD CLASS EDUCATION**

- Ranked Pakistan's No. 1 University by QS Rankings Asia
- 300+ faculty members
- 199 PhD faculty members from world's top institutions

#### **GLOBAL EXPOSURE**

- International exchange programmes with
   45 universities
- 13 Research Centres conducting interdisciplinary research in key local and global concerns



#### **ENDLESS OPPORTUNITIES**

- 196 LUMS students awarded Fulbright scholarships from 2012-15
- 650+ recruiting partners
- 80% of placements within 6 months of graduation

# INTERDISCIPLINARY PROGRAMMES WITH MULTIDISCIPLINARY LEARNINGS

- Over 30 degree programmes across
   4 Schools
- 16 Undergraduate Majors
- 13 Undergraduate Minors



#### **GENEROUS FINANCIAL SUPPORT**

- PKR 3.2 Billion disbursed as financial aid since inception
- About 30% of student body on financial aid each year

#### AN EXPERIENCE THAT LASTS A LIFETIME

- 100 acre campus with world class facilities
- 4000+ student body
- · 44 student clubs and societies
- 9000+ alumni



# LUMS UNDERGRADUATE PROGRAMMES

Congratulations on successfully reaching an important milestone of your academic journey. We welcome you to the next step in your life as you decide your future educational path. As a student at LUMS, you will have the opportunity to explore subjects and fields of study you may not have encountered or considered before. We encourage our students to delve into the depth of academic opportunities present here and find something that inspires the passion needed to build a career you will love. Life at LUMS promises to provide you with a highly rewarding education that will not only lead to a successful career but will also enlighten the entire spectrum of your life.

This prospectus offers an introduction to the various programmes at LUMS, along with an overview of what the university has to offer.

#### **A MULTIDISCIPLINARY MIX**

The focus of the LUMS undergraduate programmes is to prepare well rounded individuals with a holistic perspective. We aim to groom them with technical know-how, comprehensive knowledge, ethics and character building which goes beyond their chosen field of specialisation. Hence, a sizable percentage of courses have to be selected from fields other than the major of choice.

#### **OUR GOALS**

- Develop a spirit of learning and inquiry and a strong work ethic
- Inculcate the highest standards of personal integrity, social responsibility, tolerance and respect for humanity
- Promote an understanding of cultural diversity and richness at the local and global level
- Equip students with the knowledge, intellect and skills essential to succeed in future academic and professional endeavours

# BEGIN YOUR JOURNEY OF DISCOVERY HERE!

SULEMAN DAWOOD SCHOOL OF BUSINESS (SDSB) MUSHTAQ AHMAD GURMANI SCHOOL OF HUMANITIES AND SOCIAL SCIENCES (MGSHSS)

SYED BABAR ALI SCHOOL OF SCIENCE AND ENGINEERING (SBASSE) SHAIKH AHMAD HASSAN SCHOOL OF LAW (SAHSOL)



# INTRODUCTION

The Suleman Dawood School of Business (SDSB), established in 1986, is the oldest school at LUMS. Motivated by the desire for always being relevant to the ever changing economic landscape, SDSB since its inception, has pursued a multidisciplinary pedagogical philosophy. The School also maintains a close relationship with the industry where business leaders frequently interact with both faculty and students.

SDSB aims to provide for the varying educational needs of a culturally diverse and geographically dispersed student body. The goal is to prepare students academically, personally and professionally for successful careers and to give them opportunities to make a difference.

THE R. P. SEC.

# THE SDSB UNDERGRADUATE PROGRAMME

#### The Undergraduate programme has the following overarching objectives:

Develop students' intellectual capacity to engage in critical thinking, problemsolving and reasoning, enabling them to deal with complex business issues by integrating theory with practice

Develop an understanding of the legal, social, political, economic and technological environments

Provide students with opportunities to hone personal and interpersonal skills including effective communication enabling them to develop as independent, confident and reflective individuals who are capable of taking initiatives and leading teams

Develop students who can appreciate the importance of sustainable and ethical practices and their role as socially responsible individuals within the local, as well as global community

# SDSB offers BSc (Hons) degree in the following majors:

- Accounting and Finance
- · Management Science

13
COURSES

39 CREDITS SDSB offers core business courses in varied functional areas to achieve the undergraduate programme objectives.

- · Financial and Management Accounting
- Marketing
- · Operations Management
- Management Science
- Financial Management
- Organisational Behaviour
- Business Ethics and Corporate Social Responsibility
- Business Strategy

# ACCOUNTING & FINANCE(ACF)

#### **WHY ACF**

A major in Accounting and Finance (ACF) in BSc (Hons) provides students with a base from which to continue their studies for a professional degree or to serve as a valuable foundation for careers in business and management. The graduates of this major are prepared for careers in auditing, corporate accounting, management consultancy, government, not-for-profit organisations and taxation. The broadbased curriculum equips students with tools of intelligent analysis, planning, control and decision making.

Students can combine a variety of different complementary courses, while having the flexibility of selecting courses to suit their needs and interests. Following a specific track of courses helps students to get prepared for different professional certifications. At this time, students can follow four tracks of courses to prepare for professional certifications described on the following pages.

#### **ACCOUNTING & FINANCE CORE**

05
COURSES

15 CREDITS

#### **ACCOUNTING-CORE**

- Corporate Financial Reporting
- Auditing
- Applied Taxation

#### **FINANCE-CORE**

- ► Intermediate Finance
- ► Applied Corporate Finance

MANDATORY AUDIT INTERNSHIP

#### **TRACKS**

Students can follow a set of pre-identified courses to simultaneously complete professional certifications with their BSc (Hons) Degree in Accounting and Finance. The following tracks in partnership with the certification bodies are offered:



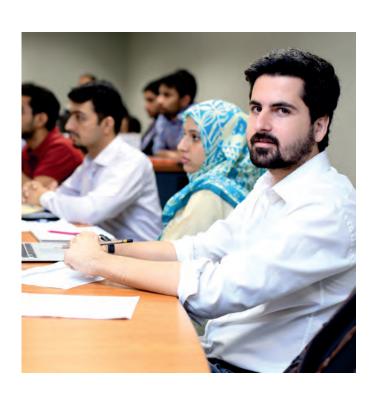
Think Ahead



The Institute of Chartered Accountants of Pakistan







# MANAGEMENT SCIENCE

#### WHY MANAGEMENT SCIENCE

The BSc degree in Management Science (MGS) is designed to prepare students to use business analytic theories and methods to make significant contributions in solving managerial and technical problems. Students learn about various theories and methods including (big) data management, business intelligence, data mining, predictive modelling and other quantitative methods to solve business problems. Students are trained with skills such as translating business problems into analytical problems, developing logical models, managing big volumes of data, evaluating data for providing solutions across business functional areas, interpreting solutions for managerial decisionmaking, and communicating results to novice and expert audiences.

#### **MANAGEMENT SCIENCE CORE**

6 COURSES 21
CREDITS

- Introduction to Information Technology
- Qualitative and Quantitative Methods in Business
- Decision Analysis
- Advanced Optimisation Techniques in Management Science
- ► Human Behaviour in Decision Models
- Business Analytics

#### **ELECTIVE COURSES**

We offer a wide range of elective courses to students that enable them to develop business acumen, global thinking, interpersonal skills, leadership traits and social conscientiousness that is necessary for success in contemporary business environment.

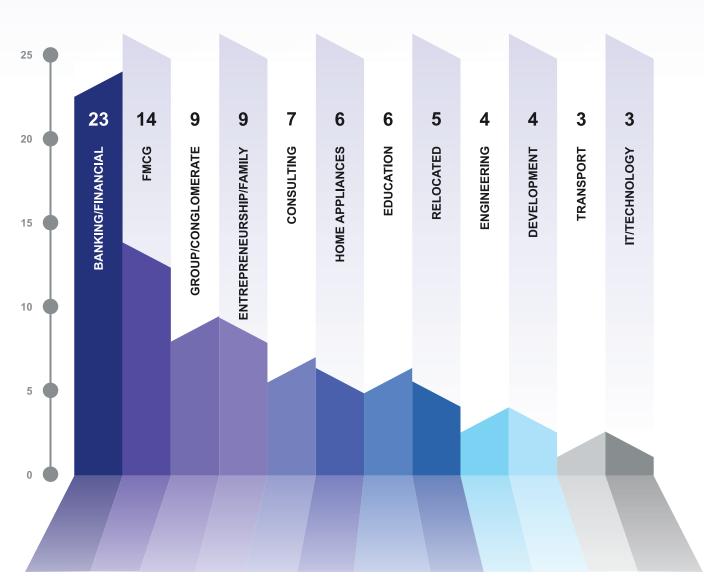
DECISION SCIENCES	MARKETING	MANAGEMENT	ACCOUNTING	FINANCE
ELECTIVES	ELECTIVES	ELECTIVES	ELECTIVES	ELECTIVES
<ul> <li>Information Systems Management</li> <li>Project Management</li> <li>Operations Management</li> <li>Supply Chain &amp; Logistics Management</li> <li>Management</li> <li>Management Science and Spreadsheet Modelling</li> <li>Financial Information Systems</li> </ul>	<ul> <li>Retail Management</li> <li>Advertising Management</li> <li>Sales Force Management</li> <li>Consumer Behaviour</li> <li>Marketing Research</li> <li>Brand Management</li> <li>Using New Media Technologies in Marketing</li> </ul>	<ul> <li>▶ Public         Administration</li> <li>▶ Governance System         of Pakistan</li> <li>▶ Contemporary         Social Policy Issues         in Pakistan</li> <li>▶ Reforming the         Public Sector</li> <li>▶ Non-Profit &amp;         Voluntary         Organisations</li> <li>▶ Agricultural         Development</li> <li>▶ Women and Policy         in Pakistan</li> <li>▶ Entrepreneurship</li> </ul>	<ul> <li>► Strategic         Management         Accounting &amp;         Control</li> <li>► Advanced         Management         Accounting</li> <li>► Advanced Financial         Reporting</li> <li>► Advanced Topics in         Taxation</li> <li>► Applied Financial         Analysis</li> </ul>	<ul> <li>▶ Options, Swaps and Futures</li> <li>▶ Financial Risk Management</li> <li>▶ Microfinance</li> <li>▶ Entrepreneurial Finance</li> <li>▶ Law and Business Finance</li> <li>▶ Commercial Banking</li> <li>▶ Investments &amp; Capital Markets</li> <li>▶ Islamic Banking &amp; Finance</li> <li>▶ Financial Derivatives</li> </ul>

# MULTIDISCIPLINARY MODES OF TEACHING

SDSB offers a unique blend of multidisciplinary modes of teaching that fully utilise modern teaching concepts of experiential learning and conventional lecture method. Projects, internships, simulation exercises, business games and industrial visits are some of the teaching tools employed by instructors to provide a truly practical learning experience to students.

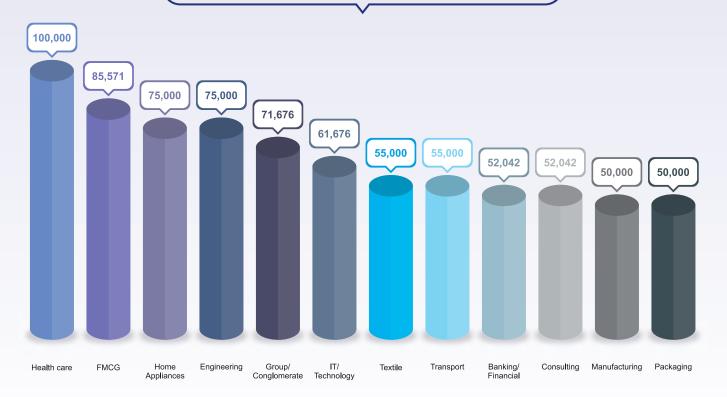
#### **PLACEMENT ANALYSIS OF THE CLASS OF 2015**

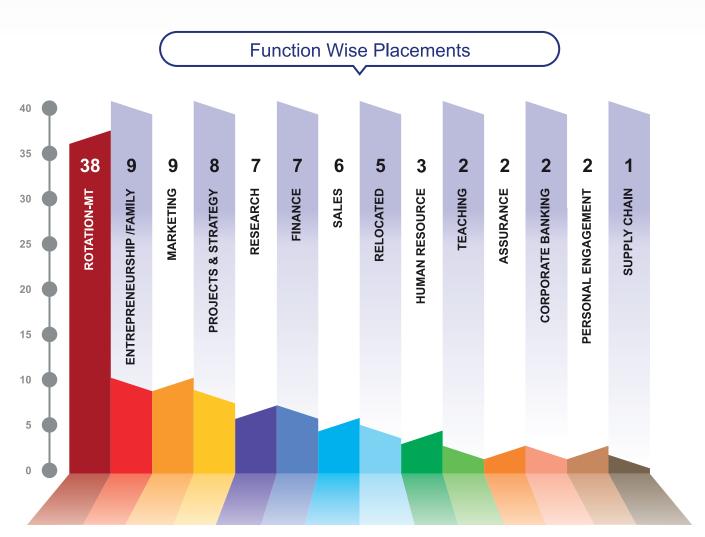
**Sector Wise Placements** 





#### Average Salary (PKR) - Sector Wise







# MUSHTAQ AHMAD GURMANI SCHOOL OF HUMANITIES & SOCIAL SCIENCES (MGSHSS)

The Mushtaq Ahmad Gurmani School of Humanities and Social Sciences (MGSHSS) at LUMS offers multidisciplinary programmes allowing students to study both, a breadth of subjects and also specialise in a chosen discipline. Students can choose to take courses in a wide range of disciplines, including Anthropology, History, Economics, English, Political Science, Philosophy, Psychology, and Sociology. Students may also take courses in Islamic Studies and foreign languages, as well as courses in a wide range of other interdisciplinary humanities and arts subjects. Literature and poetry recitals, plays and other cultural events are also held regularly.

Students are also able to take courses offered by the School's Gurmani Centre for Languages and Literature in Urdu poetry, fiction, Iqbal Studies, creative writing, Persian literature and language, comparative literature, and Arabic language. The faculty holds impressive credentials from leading international universities and includes acclaimed experts and scholars with significant publications to their credit.

The School nurtures passionate and enlightened individuals who combine depth of knowledge with social sensitivity, rigorous thinking, intellectual humility and analytical creativity. We aim to prepare students who are firmly grounded in the reality of their society and have the capacity to engage with broader global issues and contexts. And while we train students for a broad range of careers encompassing government, corporate and not-for-profit sectors, the most important aspect of studying at MGSHSS is to inculcate a life-long passion for learning that contributes to our individual and collective selves in ways that are impossible to quantify.

Students at MGSHSS participate in the University's vibrant sporting, social and intellectual life. The university, and particularly MGSHSS, holds regular workshops, seminars, conferences, lectures, and debates in which students participate at all levels, taking leadership roles and organising events.



#### PROGRAMME STRUCTURE

Upon acceptance, students are asked to list a preference for their major in their first year. They take a wide variety of courses from across the major disciplines.

# Students choose 6 out of the following first year courses:

- ► ANTH 100 Introduction to Cultural Anthropology
- ► ECON 100 Principles of Economics
- ► ECON 111 Principles of Microeconomics
- ► ECON 121 Principles of Macroeconomics
- ► ENGL 1000 Introduction to Literature in English
- ► ENGL 1111 The Word & the World
- ► HIST 101 World Civilizations
- ► HIST 124 The World Since 1453
- ► POL 100 Introduction to Political Science
- ► POL 131 Introduction to International Relations
- ► SOC 100 Introduction to Sociology

Students choose their major at the end of their first year. To complete the credit requirements for their chosen degree, students are required to take a certain number of courses from within their Major discipline, a certain number of university core subjects, and a certain number of electives from outside their discipline.

Typically, students take 4 courses per semester and four years to complete their degree.

In addition to their Major, a student at MGSHSS may also chose a Minor specialisation.

#### **MAJORS AT MGSHSS**

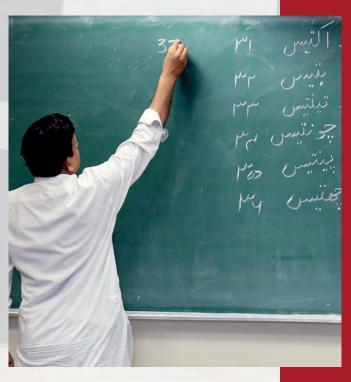
- BA (Hons) English
- BA (Hons) History
- BSc (Hons) Anthropology & Sociology
- BSc (Hons) Economics
- · BSc (Hons) Economics & Mathematics
- BSc (Hons) Economics & Political Science
- BSc (Hons) Political Science





#### **MINORS AT MGSHSS**

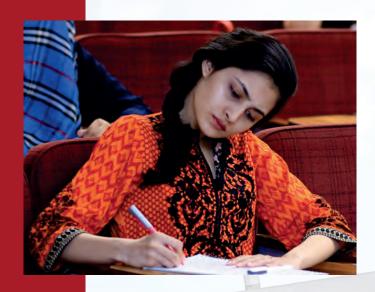
- Anthropology & Sociology
- Economics
- · English
- History
- Philosophy
- Political Science
- Psychology



# **THE MAJORS**

#### BSc (Hons) ANTHROPOLOGY & SOCIOLOGY

The Anthropology and Sociology major ensures that students get a strong disciplinary foundation with a grounding in theory and methods, along with a choice of courses that will allow them to pursue more specialised interests during the course of the programme. A diverse range of topics are studied: from the examination of gifts and exchange, bonded labour, legal anthropology and gender and power systems, to the ethnography of Pakistan and its regions. Students also have the option of undertaking a substantial piece of field based research in their final year.



#### **SAMPLE COURSES**

- SOC 230 Global Cities 1300-2000 AD
- SOC 310 Classical Social Theory
- ANTH 234 Anthropology of Rights
- ANTH 235 Introduction to Development Studies
- ANTH 460 Sufism in South Asia

#### **BSc (Hons) ECONOMICS**

The Economics programme offers a wide variety of courses, including Macroeconomics, Microeconomics, Econometrics, Development and Policy, Trade and Finance, Statistics and Analysis. Courses are geared towards both mainstream and heterodox theory and empirical evidence, which ensures that a broad base of perspectives, new ideas and applications are presented to students. This equips students with analytical and quantitative skills that are widely applicable across many professional disciplines.



#### SAMPLE COURSES

- ECON 211 Intermediate Microeconomics
- ECON 221 Intermediate Macroeconomics
- ECON 233 Introduction to Game Theory
- ECON 230 Statistics and Data Analysis
- ECON 313 Labor Economics
- ECON 330 Econometrics

#### **BSc (Hons) ECONOMICS & POLITICS**

The Economics and Politics programme is a carefully constructed major that provides students the opportunity to study two disciplines as well as areas that cut across traditional departmental and disciplinary lines. Through courses developed and taught by the Economics and Political Science faculty, students examine the globalised world using a variety of conceptual lenses supplied by the social sciences, learn multiple ways of solving problems and explore areas of inquiry that intersect traditional disciplines.

Students who choose this Major, take core courses from both Economics and Political Science set by the School. To complete their major, students are required to take a set number of courses from the ECON course code and a set number of courses from the POL course code.



#### **BSc (Hons) ECONOMICS & MATHEMATICS**

The Economics and Mathematics joint major provides a strong base to those students who intend to pursue further studies at the graduate level in the field of Economics. Students seeking admission to a graduate programme have a higher chance of getting admitted to top ranked schools if they have taken Mathematics courses like calculus, analysis and linear algebra during their undergraduate degree programme.

Students opting for this Major, take core courses from both Economics and Mathematics set by the School. To complete their major, students are required to take a set number of courses from the ECON course code and a set number of courses from the MATH course code.

#### **BA (Hons) HISTORY**

The History programme offers a wide range of courses across a range of historical time periods, geographical regions, and approaches. The specialised faculty have extensive research interests and teaching experience directly related to the undergraduate courses on offer. The courses offer a multifaceted approach to the past through primary and the latest secondary sources. There is a focus on reading, analysis and debate and discussion. Students learn to read historical documents and become attuned to the process of narrative construction.



#### **SAMPLE COURSES**

- HIST 2215 The History of Colonial Expansion 1492 - 1919
- HIST 312 Mughal Architecture
- HIST 3215 Imperialism and its Discontents in South Asia
- HIST 238 Debating Revolutions
- HIST 329 The Cold War

#### **BSc (Hons) POLITICAL SCIENCE**

The Political Science major aims at developing the thinking, reading, writing and oral expression skills needed for a critical understanding of politics. Students are strongly encouraged to re-evaluate commonly accepted ideas and consider alternative explanations. Our pedagogical approach lays special emphasis on helping the students to develop rigorous oral and written argumentation skills and to support their own conclusions with carefully deployed evidence. Students take courses in the following sub-fields: Political Theory, Comparative Politics, International Relations, Public Policy (Policy Analysis or Government) and Political Sociology.



#### **SAMPLE COURSES**

- POL 212 Class Structure in Pakistan
- POL 324 Marxism and the Modern World
- POL 131 Introduction to International Relations
- POL 331 Pakistan's Foreign Policy
- POL 342 IPE: States and Markets

#### **BA (Hons) ENGLISH**

The BA in English, an innovative and cutting-edge programme, seeks to train its students to ask questions that have a global resonance. A curriculum rich in critical theory, analysis and contextual thinking, the English major will produce broadly multifaceted graduates who are ready to take on graduate studies in English as well as a broad range of careers. Courses are offered in five areas: British Literature, American Literature, World Anglophone Literatures, Creative Writing and Literatures in Translation.



#### **SAMPLE COURSES**

- ENGL 2713 Literature of Conflict
- ENGL 3336 William Shakespeare
- · ENGL 3355 The Novel in the 18th Century
- ENGL 2452 Fiction Writing Workshop 1
- ENGL 2311 Domesticity and Dominance

#### Sector Wise Placements 2015



#### **NEHA RAHEEL**

BA (Hons) Humanities 2014

"Having taken Philosophy courses such as Scientific Imagination, History courses such as Society and Memory and Literature courses such as Mystical Poetry from the Arabic, Persian and South Asian Traditions – LUMS provided me the opportunity to interact with the greatest minds of the country. Within the ambit of the classroom, I have debated concepts of the nation state, sufism, scientific philosophy and so much more and learned from the best instructors in Pakistan."

Neha Raheel is currently studying for a Master's in Education at the University of Pennsylvania. She has been awarded the prestigious Fulbright Scholarship.





#### **MARIA HASSAN**

BSc (Hons) Social Sciences 2007

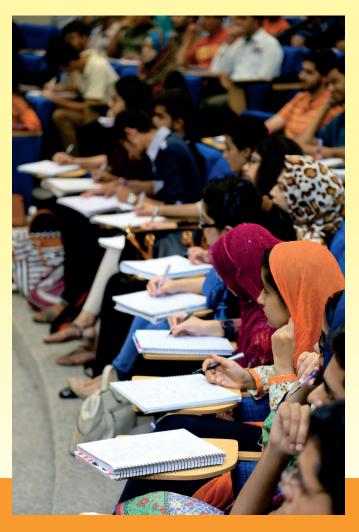
"The faculty's open-door policy, and their insistence on critical thought and discussion, set the stage for a stimulating four years that I feel lucky to have experienced. I found myself in the company of incredibly intelligent, hard-working and articulate peers who were as inspiring as they were enjoyable. The skills I developed at LUMS – critical thinking, analytical reasoning, effective articulation, and ability to locate, organise and evaluate information from diverse sources – have continued to prove invaluable and have been at the heart of my career opportunities."

Maria Hassan has an MSc from the LSE, London and an MA from Tufts University. She currently works for the United Nations at the UN headquarters in New York.









Syed Babar Ali School of Science and Engineering (SBASSE) at LUMS is the first private research school of science and engineering in Pakistan. In higher education, the term 'research school' refers to a model of teaching and scholarship practiced by some of the best institutions in the world where the primary function of the university is to 'create knowledge'. SBASSE has consciously modelled itself along the lines of the world's top research schools and has a highly qualified faculty to accomplish its mission. The hallmark of SBASSE is its 'no-boundaries' philosophy, which encourages cross-disciplinary collaborations not only between the various disciplines at SBASSE but also those offered by other Schools at LUMS.

All students are involved in the quest to probe some of the deepest and most pertinent issues and questions facing humanity, from the structure of matter to problems of water, energy, environment, sustainability and healthcare. The overarching objective of SBASSE is to produce individuals who are knowledgeable and technically savvy in their respective areas of expertise and who are not afraid to tackle challenging problems. All undergraduate students admitted to SBASSE are put through a common "core curriculum" in their first year and part of the second year, which comprises fundamental courses in Biology, Chemistry, Computer Science, Mathematics and Physics. Students declare their major towards the end of their first academic year. The School has an active advising system that allows it to track student performance throughout and also helps them in selecting their major.

## **BIOLOGY**

Recent advances have brought Biology to the forefront of contemporary sciences and integrated it with numerous disciplines, including Chemistry, Mathematics, Physics, Electrical Engineering and Computer Science. This has led to the emergence of new areas of study and research including Bioinformatics and Computational Biology, Mathematical Modelling of Biological Processes and Diseases, Biophysics and Systems Biology, all of which are in the realm of the Biology programme at SBASSE.

Two streams are offered to aspiring Biology majors namely Molecular & Cellular Biology, and Computational Biology. Successful completion of the introductory biology sequence prepares students for advanced studies in a range of biological sub-disciplines that include Biochemistry, Molecular Biology, Cell Biology, Genetics and Computational Biology. The Department of Biology consists of seven full-time faculty members who are actively involved in pedagogy and research. Research programmes led by different faculty members are addressing fundamental questions and mechanisms linked to infectious diseases, cancer cell signalling and cancer therapeutics, plant disease resistance, structure based vaccines, epigenetics of development, genome evolution and bioinformatics.

Additionally, there is also a team of Research Assistants and Post-doctoral Fellows who not only actively contribute to the teaching of freshman and junior level laboratory courses but also spend a significant portion of their time working on research projects and supervising senior students for their terminal year projects. The success of the Biology programme is reflected in the placements of its graduates, many of whom have won fully funded PhD studentships at many top-tier universities that include Dartmouth, Harvard, Cornell, Yale, University of Pennsylvania, McGill, Texas A&M University, The Scripps Research Institute, Indiana University, University of Chicago, University of North Carolina Chapel Hill, University of Illinois at Urbana Champaign and ETH Zurich.





# **PHYSICS**

The Department of Physics has an outstanding teaching and research environment. Current research activities include probing the fundamental physical aspects of the universe and the underlying mathematical structures, as well as novel applications in diverse areas, including nanoscience, optics, nano-photonics, plasmonics, quantum dynamics and magnetic materials.

The Department encourages its students to get involved in research questions and exploratory experiments outside the formal classroom or laboratory coursework. Regular seminars and colloquia are led by faculty, students, as well as distinguished speakers from outside LUMS. Collectively, such activities allow students to remain abreast of high-impact, cutting-edge research.

Our faculty and students also enjoy active collaborations with research groups and consortia throughout the world, such as through a Federation Agreement with the Abdus Salam International Centre for Theoretical Physics in Trieste, Italy and exchange agreements with the University of Electrocommunications, Tokyo. Another extension of this is the invlovement of students in the summer research programmes both at LUMS and other institutes nationally and internationally. Our laboratories have provided a model that has been successfully replicated at other universities in Pakistan, all within the cost-conscious milieu of the developing world. The Department of Physics has transferred several indigenously-developed teaching demonstrations and experiments to Habib University, Nusrat Jahan Degree College, Institute of Space Technology and GIK Institute of Engineering Sciences and Technology.

### **MATHEMATICS**

Mathematics may best be described as the study of structure, order and relationships of, and between, numbers, quantities, forms and space. Deemed to be the 'mother of all sciences', mathematics has become the language of modern science.

The department has expertise in both Pure and Applied Mathematics. The focus of research in pure mathematics is in Algebraic Geometry and Operator Theory, while in Applied Mathematics, faculty interests include, Scientific Computation, Mathematical Biology, Quantitative Finance and Symmetry Methods. The Department offers a variety of interesting courses in these areas, which provide a strong grounding to students for academic and non-academic careers. Many of our graduates have gone on to pursue excellent graduate programmes in top-tier institutions while others are working for some of the best corporations in Pakistan and abroad.



The Department of Mathematics also houses the Centre for Advanced Studies in Mathematics (CASM), which is affiliated with the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste, Italy. The Centre organises workshops and symposia on various topics throughout the year.

# **ELECTRICAL ENGINEERING**

The Electrical Engineering (EE) Department offers a rigorous and modernised undergraduate programme which is accredited by the Pakistan Engineering Council. The department has about 400 undergraduate and graduate students and 20+ full-time PhD faculty members. The first batch of EE students graduated in June 2012, which along with the subsequent batches has been a tremendous success both in terms of higher studies and job placements. The Electrical Engineering programme gives students a strong foundation and specialisation in important contemporary areas including Communication & Networks, Embedded Systems, Signal Processing, Controls and Robotics, Renewable Energy Systems and Optoelectronics. Students are also strongly encouraged to collaborate with other disciplines at SBASSE.

The gradutes of the EE department have been placed in famous universities around the globe such as MIT, UT Austin, Cambridge, EPFL Switzerland, UPenn, TUM Munich, Carnegie Mellon University, Rice University, UIC Chicago, Rutgers, Georgia Tech, USC, NTU Singapore, and University of Melbourne, among others. Nearly 20 EE students so far have received the Fulbright scholarship award for higher studies in the USA.

Structured into various research clusters and labs, the department has collaborated and obtained research funding from local and international industry including the likes of National Instruments, Mentor Graphics and Mitsubishi. It has also secured competitive grants from agencies including Higher Education Commission (HEC), National ICT R&D Fund and German Academic Exchange (DAAD). Some faculty members have served as consultants and collaborators for several government agencies and non-government organisations including the Punjab Environmental Protection Agency (EPA), Punjab Irrigation Dept. (PID), Cleaner Production Institute (CPI), LESCO, World Wildlife Fund (WWF) and International Water Management Institute (IWMI).

## **CHEMISTRY**

The undergraduate programme in Chemistry at SBASSE, aims to address the fundamental questions in Chemical Sciences and to relate them to the real life commercial and industrial applications. The engaging design of our BS programme allows students to actively participate in discussions and deliberations conducive to generating scientific knowledge of the highest quality. Our programme is designed to give students a robust understanding of the fundamental principles of Chemistry through a variety of theory, laboratory and project-based courses.

The integrated nature of our curriculum allows its constituting instruments to achieve the targeted learning outcomes in a synchronised manner. The theoretical knowledge imparted through the classroom lectures is augmented by carefully designed laboratory courses. These laboratory courses are organised in a manner that makes our students proficient in critical chemical procedures and techniques covering fundamental concepts as well as experimental methods that serve as stepping stones for effectively conducting research in academic settings and succeeding in industrial assignments. All our undergraduate students participate in research projects during their senior year. These research projects are designed to instill critical thinking and issue identification as well as impart problem-solving skills to our students. The students are able to choose their research projects from a variety of research streams that include nanotechnology, materials science, drug and new chemicals discovery, biomedical sciences, green chemistry, catalysis, and environmental remediation under the supervision of accomplished, world-class faculty members.

The success and effectiveness of the undergraduate programme in Chemistry is evident from an almost 100% success rate of our BS students in winning fully funded PhD scholarships from some of the world's best universities including Massachusetts Institute of Technology (MIT), Princeton, Yale, Cornell, Chicago, Rice, University of Illinois at Urbana Champaign, Carnegie Mellon University, Texas A&M University, University of Massachusetts at Amherst, University of Minnesota and Arizona State University. Our achievements endorse the fact that the quality of Chemistry undergraduate programme is at par with the related programmes offered by the leading institutions in the world.

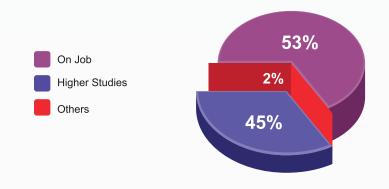
## **COMPUTER SCIENCE**

The undergraduate programme in Computer Science offers an excellent learning opportunity to students with the help of top-notch research-active faculty. Students learn how to build computer systems (computer architecture), how to make machines think (artificial intelligence), how to build computers that can "see" (computer vision), how to design software that works seamlessly from different locations (computer networks and distributed systems), how to model complex problems (modelling and simulation), how to develop large-scale software systems (software engineering), how to organise and manage very large sets of data (databases) and how to design more efficient computing algorithms (theory of computation). With a CS degree, students can launch their own technology start-up companies, work in industry, or pursue graduate education.

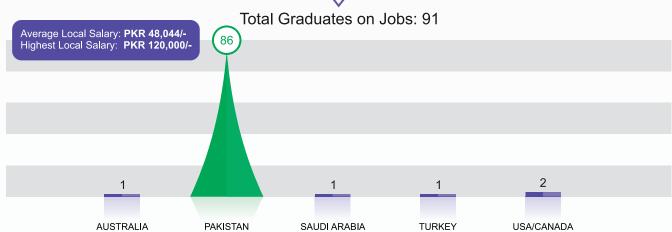
The CS undergraduate degree prepares students to excel at solving problems creatively; an important skill that can be applied to a variety of fields. LUMS CS graduates have enjoyed excellent job placements over the years in companies like Google, Microsoft and Facebook, as well as in leading software houses in Pakistan. Due to the rigorous coursework and undergraduate research opportunities, our graduates are consistently accepted in leading MS and PhD programmes abroad in universities such as Stanford, MIT, UC Berkeley, CMU, Harvard, UT Austin, and Cornell.

Since a CS degree also considerably lowers barriers for building a technology start-up, many CS graduates have opted to start their own companies some of which (e.g., Confiz Solutions, Lumensoft and Eyedeus Labs) have become leading market names.

#### **Undergraduate Placement Summary**

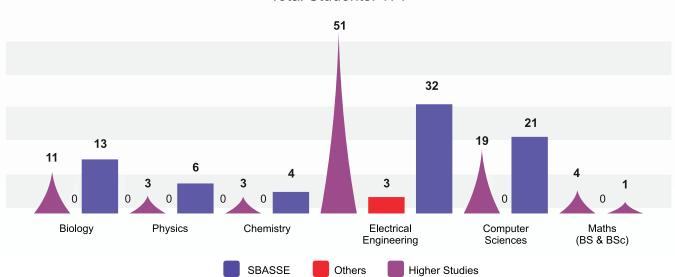


# Job Placements



#### **Placement Analysis**

Total Students: 171

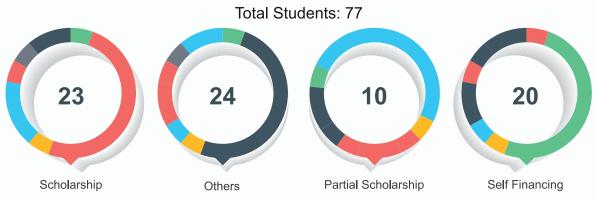




#### Sector Wise Placements



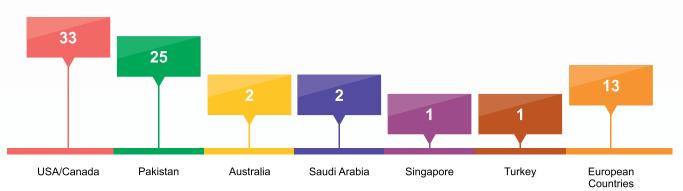
#### Higher Studies – Scholarship & Self Financing



Others include those students who are preparing for GRE, CSS and are inaccessible

# Higher Studies Including Pakistan





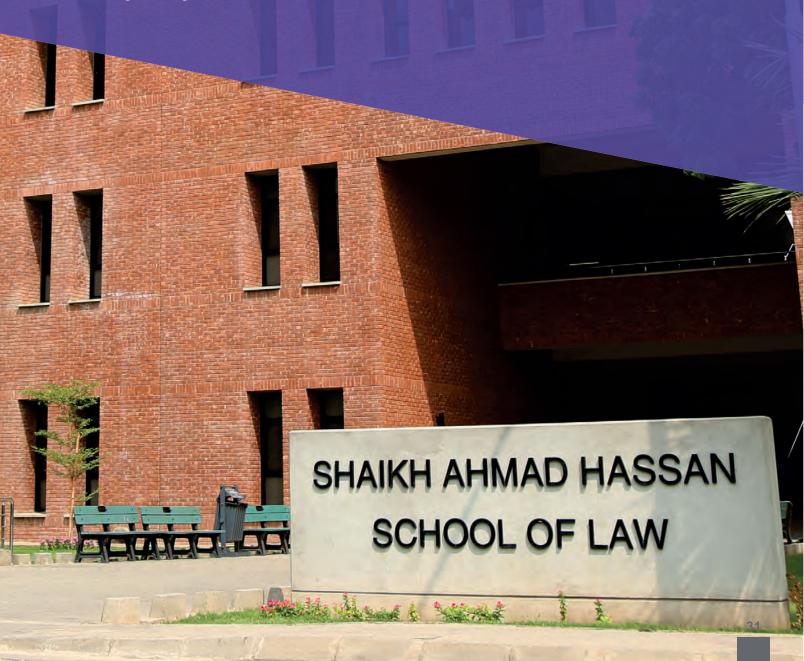






The Shaikh Ahmad Hassan School of Law (SAHSOL) which has grown out of the Department of Law & Policy at LUMS, shifted into a custom built building in September 2015. The building, spread over an area of 78,000 square feet, is located in the LUMS campus. It comprises of auditoriums, offices for faculty, discussion rooms, meeting rooms, a Centre for International Legal Studies and a state-of-the-art Moot Court, a replica of the court room of the Chief Justice of the Lahore High Court.

SAHSOL has been functioning since 2004 and offers a 5-year joint BA-LL.B undergraduate degree, accredited by the Pakistan Bar Council. The BA-LL.B degree allows students to spend the first two years of the programme towards getting the essential academic prerequisites for a sound legal training as well as vital communication and computer skills. Over the next three years, the students undergo rigorous exposure to fundamental and specialised subjects in law, as well as exciting new inter-disciplinary areas such as law and economics, regulation and policy making. The Law School will thus become a significant contributor to the intellectual evolution and ideological growth of our society, continuing and building upon the impressive accomplishments of LUMS in the fields of Management, Humanities, Social Sciences, Science and Engineering.



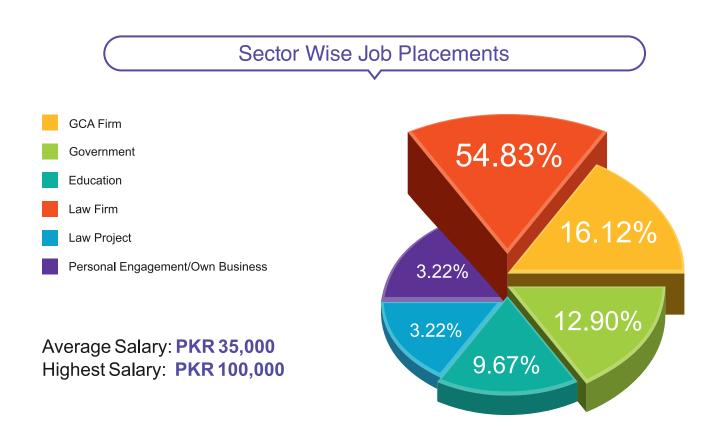
# TEACHING METHODOLOGY

SAHSOL is a centre for an intellectually demanding, research-informed, legal education. Our degree is one of the most highly regarded undergraduate law degrees in the country, and those who do well in it are in high demand in the legal profession and in other fields in which professional analytical work is required. We offer a degree programme that is diverse and innovative in terms of both content and teaching methods. Our core and optional units reflect the wide variety of approaches to legal research adopted by the scholars in the Law School, and our students are encouraged to develop strong analytical, critical thinking, evaluation and communication skills.

Learning from leading academics and practitioners, students not only receive an outstanding grounding in the theory of law, but are able to understand how those principles are applied in practice through a range of student-led activities and competitions including mooting and working on a range of pro-bono activities as well as study legal judgments and statutes. Thus students gain valuable insights into the impact of economic, cultural and political change on law, ensuring they develop an understanding of law in all its contexts. In short, we aim to provide a supportive environment in which all our students can flourish to the fullest, both academically and personally.

#### PLACEMENT ANALYSIS OF THE CLASS OF 2016

Many of our programme's graduates are currently pursuing Masters of Law degrees from highly prestigious universities including Berkeley, Cambridge, Columbia, Harvard and Michigan. Other graduates are employed in a wide array of organisations ranging from private law firms to regulatory bodies, financial institutions, NGOs, and as law clerks with judges of both, the Supreme Court and the High Courts.





# UNDERGRADUATE MINORS

A minor performs a couple of important functions. It serves to broaden students' horizons and expand the range of options available to them. Students can complement the study of the major by selecting a minor in an adjacent or related area, thereby sharpening their understanding and deepening the knowledge acquired in their principal area of specialisation. A minor can also serve as a base for, and facilitate, interdisciplinary study and inquiry. Students also have the option of selecting a minor in an area completely unrelated to their major and can elect to explore particular areas of interest by selecting a discipline much farther afield. Students are in no way constrained or restricted in their choice of a minor and are not obliged to "justify" their selection by demonstrating its relevance to a particular field or area of specialisation.

Minors are being offered in the following university approved areas under their respective departments

- Anthropology and Sociology
- ▶ Biology
- Chemistry
- ▶ Computer Science
- ▶ Economics
- ▶ History
- ▶ English
- Mathematics
- Philosophy
- Physics
- Political Science
- Psychology
- ▶ Public Management



# **CAMPUS AND FACILITIES**

The LUMS campus is spread over a 100 acres and is fully equipped with numerous modern day facilities for students. It is adjacent to the Defence Housing Authority, a developed suburb of Lahore with several restaurants, hospitals and other essential facilities. The Allama Iqbal International Airport is also in close proximity to the campus. In accordance with the University's mission, the campus has been carefully planned to provide excellent facilities to students and to create a safe environment that is conducive to learning. Some of its features include modern classrooms, an up to date library, state-of-the-art laboratories, on-campus housing, a mosque and integrated sports and recreational facilities.

# **GAD & BIRGIT RAUSING LIBRARY**

Providing advanced systems and technologies and a wide array of user empowered services, the Gad and Birgit Rausing Library at LUMS provides excellent services and facilities to support the academic and research needs of students, faculty, and staff. It has a rich collection of over 260,000 print books and more than 180,000 electronic books that support scholarly interests and practical research activities. The library subscribes to over 315 print journals and provides campus-wide and VPN access to 35,000 electronic journals.

The institutional repository of the LUMS library provides access to indigenous knowledge (theses, dissertations), faculty publications, company reports, and other local publications. The multimedia section of the library has over 3,200 audios/videos and 40 CD-ROM databases.

Through a recently launched mobile app and a web interface called iPortal, the library allows free and secure access to library catalogues, user accounts and campus wide access to its full text resources. This allows members to manage their library accounts and keep tabs on circulation activities including renewals or reservation of circulated items. Another useful service provided by the library is the Selective Dissemination Information (SDI) which keeps members updated about new additions to the library's collection. Besides remote access, the library remains operational seven days a week until midnight and is open round the clock during examinations.



## STUDENT SOCIETIES AT LUMS

Students are encouraged to take part in a number of student run societies, catering to a diverse range of interests. Whether it is the LUMS Entrepreneurial Society (LES), the LUMS Model UN Society (LUMUN), the Debates and Recitation Society (DRUMS), Sports at LUMS (SLUMS) or Publications at LUMS (PLUMS), students are made to feel part of the LUMS community through a wide range of activities arranged by the societies. Here is a list of the student societies you can become a part of:

- ► AIESEC LUMS Chapter
- Arts Society
- Amnesty International LUMS Chapter
- Alpha Society
- Culture Society
- ▶ Debates and Recitation at LUMS (DRUMS)
- DRAMALINE
- ► Feminist Society at LUMS (FEMSOC)
- ▶ IEEE LUMS Student Chapter
- ► LUMS Religious Society (LRS)
- LUMS Model United Nations (LUMUN)
- LUMS Community Service Society (LCSS)
- ► LUMS Adventure Society (LAS)
- ► LUMS Media Arts Society (LMA)
- ► FINTRA-Finance Society at LUMS
- LUMS Students Math Society (LSMS)
- LUMS Daily Student Society (LDS)
- ► LUMS Literary Society (LLS)
- Law and Politics Society (LPS)
- ► LUMS Society of Professional Accountancy (LSPA)
- Music Society
- ► LUMS Environmental Action Forum (LEAF)
- LUMS Entrepreneurial Society (LES)
- LUMS Gaming Association (LGA)
- ▶ LUMS Photographic Society
- LUMS Consultancy Group (LCG)
- Publications at LUMS (PLUMS)
- Random Walk Economics Society
- Sports at LUMS (SLUMS)
- ▶ ShARE LUMS
- ▶ SPADES

# INTERNATIONAL EXCHANGE PROGRAMMES

LUMS has regular exchange programmes with the following universities:

- Waseda University, Tokyo, Japan
- National University of Singapore (Summer Internship Programme)
- University of Peradeniya, Sri Lanka
- University of Passau, Germany
- ► FH-Joanneum University of Applied Sciences, Graz, Austria
- Middlesex University, UK
- Humboldt University, Germany
- University of Glasgow, UK
- Simon Fraser University, Canada
- Wake Forest University, US
- Institute of South Asian Studies, NUS, Singapore
- Rice University, USA
- Seoul National University, South Korea
- University Utara Malaysia, Malaysia
- University Sains Malaysia

# **FINANCIAL SUPPORT**

A good education is the most important investment that can be made for children and their future. LUMS realises that making such an investment in children can place financial stress on parents. Since inception, LUMS has tried its utmost to make quality education accessible to all students in Pakistan, including those from low and middle income households. The University provides generous financial support packages to qualifying students in all its degree programmes and to date, has disbursed more than PKR 3.2 Billion in financial support to its students. Currently about 30% of the students at the university get some form of financial support from LUMS based on the assessed financial need. During the academic year 2015-16, LUMS disbursed more than PKR 525 Million as financial aid to its students. A large number of financial support opportunities are available to undergraduate and graduate students at LUMS based on need and merit. Assistance is given in the form of tuition fee waivers, stipends, student loans and on-campus jobs. Other sources include the USAID Funded Merit and Need Based Scholarship Programme and various named scholarships. However, the bulk of the financial support at the undergraduate level is given via the following two programmes:



#### **LUMS FINANCIAL SUPPORT**

Financing of a student's education is a commitment involving the student, his or her family and our institution. We at LUMS, gear all efforts towards assisting as many students as possible within our limited resources. Financial support is offered to students with demonstrated needs. At the undergraduate level these awards are available in the form of tuition fee waivers and do not have to be repaid. They cover partial to full tuition fee expense of the programme. The range of financial assistance over the last year has been between 20% and 100%. These awards are reassessed each academic year, based upon performance and demonstrated financial need.

#### NATIONAL OUTREACH PROGRAMME

The National Outreach Programme (NOP) is a LUMS initiative to promote and cultivate the local talent and potential of Pakistan, especially from the lowest income households. The programme was launched in 2001, with an aim to extend world-class education to the brightest students from humble financial backgrounds coming from all over Pakistan. Based on financial assessment, this programme covers 100% tuition fee, accommodation, living and books allowance.

#### NOTE:

It should be noted that all admission decisions are based strictly, and without exception, on merit. Financial need, or otherwise, will in no way impact the admission decision. Financial support applications are processed after a student has been accepted into the programme and have no bearing on admission. Financial support decisions are based on a thorough review of the financial situation for which parents and students are responsible to provide all necessary documentation and records, which also includes physical verification. While LUMS makes every effort to assist its students wherever it can, the University cannot guarantee anyone financial support and all awards are reassessed each academic year based on performance, need and prevailing University policies.

# **ADMISSIONS AND DEADLINES**

#### Minimum Eligibility Criteria for UG Programme Admission Fall 2017

Students are selected for admission to LUMS Undergraduate Programmes based on the following factors:

#### 1. Academic Background

For Complete Degree:

- Successful completion of Matric (70% marks or above) & FA (65% marks or above)/FSc/ ICS/ICOM (70% marks or above)
- O' Levels\* results (in at least 6 subjects) with an average grade of at least 'B' in all subjects attempted; and A' Levels in at least 3 principal subjects with at least 2 Bs and 1 C grade. No credit will be given for Advanced Subsidiary and General Paper.
- American High School Diploma (HSD) 70% or above/Grade point average of B or above
- International Baccalaureate (IB) at least 28 out of 45 points
- Combination of the above
- Any other equivalent qualification (minimum acceptable scores will be determined by the Admissions Committee)

Candidates who have already completed their A' Levels (have taken the exam of minimum three A' level principal subjects) and do not meet the minimum grades requirement (specified in subsection 1) must improve their grades in order to be eligible for admission. A' Levels exams are held in November and June. To be eligible for admission in 2017, applicants must improve their A' Level grades in November 2016. Applicants planning to improve their grades by taking June 2017 exams are not eligible for the Fall 2017 session.

#### For Incomplete Degree:

- Successful completion of Matric (70% marks or above) & FA (part I) (65% marks or above)/FSc (part I) / ICS (part I) / ICOM (part I) (70% marks or above)
- O' Levels\* results (in at least 6 subjects) with an average grade of at least 'B' in all subjects attempted; and A' Levels in at least 3 principle subjects with at least 2 Bs and 1 C grade. No credit will be given for Advanced Subsidiary and General Paper
- American High School Diploma (HSD) (first year) (70% or above/Grade point average of B or above)
- International Baccalaureate (IB) at least 28 out of 45 points
- · Combination of the above
- Any other equivalent qualification (minimum acceptable scores will be determined by the Admissions Committee)

\*For SBASSE admissions, principle subjects for A' Levels are Biology, Chemistry, Computing /Computer Science, Mathematics, Further Mathematics and Physics.

\*Candidates who have either completed or are in the last year of completion of their education, which does not lead to Matric/FA/ICS/ICOM/FSc will be required to get an equivalence certificate from the (IBCC), Islamabad, Pakistan. Candidates who have applied for an equivalence certificate from the IBCC and have not received the certificate before the application submission deadline should submit it as soon as they receive it.

In addition to the condition(s) stipulated by the LUMS, all admitted students MUST meet the prescribed conditions as stated on the Higher Education Commission (HEC), Pakistan website in order to get their LUMS Undergraduate degree attested from the HEC, Pakistan.

