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# **UNDERGRADUATE**PROGRAMMES

On the road to success





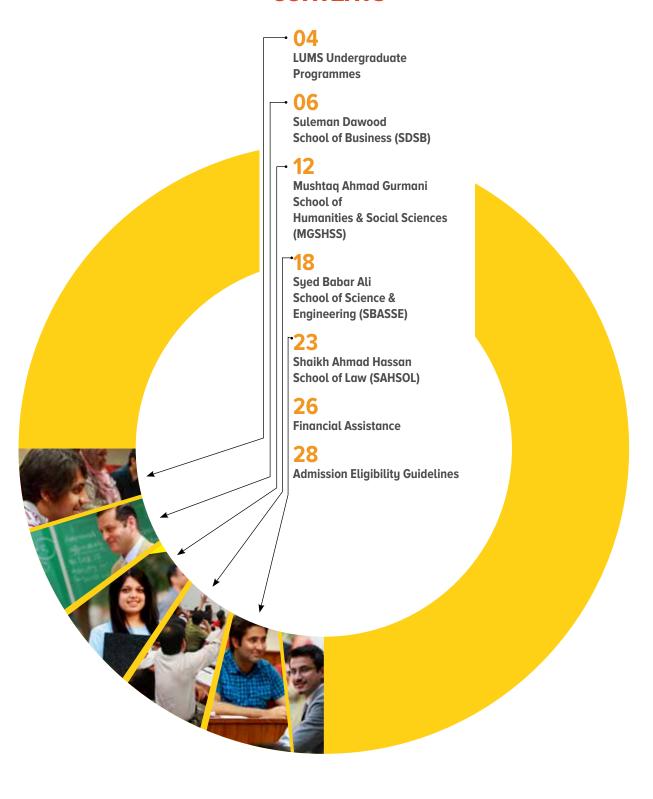




Suleman Dawood School of Business Mushtaq Ahmad Gurmani School of Humanities & Social Sciences Syed Babar Ali School of Science & Engineering Shaikh Ahmad Hassan School of Law



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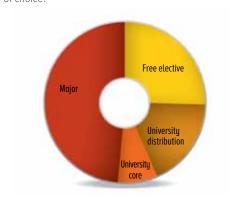






#### **A MULTIDISCIPLINARY MIX**

The focus of the LUMS undergraduate programmes is to prepare individuals in not just their chosen field of specialisation but also to give them a holistic perspective that grooms them in technical know-how, general knowledge, ethics and character building. Hence, a sizable percentage of courses have to be selected from fields other than the major of choice.





#### **OUR GOALS ARE TO**

- 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



# **SULEMAN DAWOOD SCHOOL OF BUSINESS**

(SDSB)

#### Inspiring Business Excellence

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, since its inception SDSB has pursued a multidisciplinary pedagogical philosophy. The design process has been guided by a strong commitment to rigorous economic and management research via specialised research centres such as the Strategic Sectors Research Centre, Social Enterprise Development Centre and the Case Research Centre.

SDSB 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 with the goal of preparing students academically, personally and professionally for successful careers and to give them opportunities to make a difference.

SDSB offers BSc (Honours) degrees in the following majors:

## **Accounting & Finance Management Science**

# Ranked #1 By HEC in Business

# SDSB UNDERGRADUATE PROGRAMMES

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

- Develop students' intellectual capacity to engage in critical thinking, problem-solving and reasoning, enabling them to deal with complex business issues by integrating theory with practice
- ▶ Develop understanding of the legal, social, political, economic and technological environments
- ▶ Provide students with opportunities to hone personal and interpersonal skills including effective communication to enable them to develop as independent, confident and reflective individuals who are capable of taking initiative, working in 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

#### **BUSINESS CORE**





- ▶ Principles of Financial Accounting
- ▶ Principles of Management Accounting
- ▶ Principles of Management
- ▶ Principles of Marketing
- ▶ Introduction to Business Operations Modeling
- ▶ Introduction to Management Science
- ▶ Principles of Finance
- ▶ Organisational Behaviour
- ▶ Computer & Problem Solving
- ▶ Business Communication
- ▶ Business Law
- ▶ Business Ethics and Corporate Social Responsibility
- ▶ Strategic Business Management





# **Accounting** & Finance

Accounting and Finance (ACF) is of critical importance to both public and private sector organisations. A major in Accounting and Finance provides students with a basis from which to continue their studies for a professional degree or to serve as a valuable foundation for careers in business and management.

Students can combine a variety of different complementary subjects, while having the flexibility of selecting courses to suit their needs and interests. Course requirements for each area of specialisation are designed to ensure that students acquire a background in liberal arts and sciences, as well as significant proficiency in their major field.

Courses are grouped by subject areas and are specified as either core (compulsory) or elective (optional).

5 COURSES 15 CREDITS

### **Accounting - Core**

- ▶ Corporate Financial Reporting
- Auditing
- ▶ Applied Taxation

#### **Finance - Core**

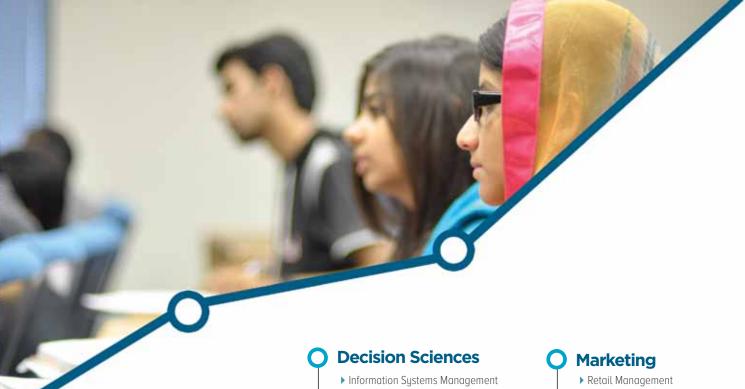
- ▶ Intermediate Finance
- ▶ Applied Corporate Finance

#### Manadatory Audit Internship

### **Accounting - Electives**

- ▶ Strategic Management Accounting & Control
- ▶ Advanced Management Accounting
- ▶ Advanced Financial Reporting
- ▶ Advanced Topics in Taxation
- ▶ Applied Financial Analysis

ICAP and ACCA
Global Exemptions
for ACF Graduates



#### **Finance - Electives**

- ▶ Econometrics
- ▶ Elements of Financial Forecasting
- ▶ Applied Time Series Finance
- ▶ Options, Swaps and Futures
- ▶ Time Series Econometrics
- ► Financial Risk Management Financial Institutions & Markets
- ▶ Microfinance
- ▶ Behavioral Finance and Micro Financial Institutions
- ► Economics of Investment & Finance International Trade Investments
- ▶ Entrepreneurial Finance
- ▶ Law and Business Finance
- ▶ Capital Markets & Corporate Governance
- ▶ Applied Corporate Finance
- ▶ Commercial Banking
- ▶ International Finance
- ▶ Investments & Capital Markets
- ▶ Islamic Banking & Finance
- ▶ Quantitative Finance
- ▶ Financial Time Series Analysis
- ▶ Stochastic Calculus
- Practical Quantitative Finance: The Art of Derivative Pricing Financial Engineering and Risk Management
- ▶ Stochastic Calculus for Finance
- ▶ Financial Derivatives
- ▶ Portfolio Management
- ▶ Fixed Income Securities

- ▶ Project Management
- ▶ Operations Management
- ▶ Supply Chain & Logistics Management
- Management Science and Spreadsheet Modeling
- ▶ Financial Information Systems
- ▶ Enterprise Risk Management
- ▶ Research Methodology

### Management

- ► Applied Business Writing & Communications
- ▶ Business Ethics and Corporate Social Responsibility
- ▶ Public Administration
- ▶ Governance System of Pakistan
- ► Contemporary Social Policy Issues in Pakistan
- ▶ Reforming the Public Sector
- ▶ Non-Profit & Voluntary Organisations
- ▶ Rethinking Policy: Critical Perspectives on Pakistan's Agricultural Development
- ▶ Public Finance and Budgeting
- ▶ Women and Policy in Pakistan
- ▶ Markets & Society
- ▶ Sociology of Organisations
- ▶ International Business
- ▶ Deal Making
- ▶ Corporate Law
- ▶ Personal Effectiveness
- ▶ Entrepreneurship
- ▶ Social Entrepreneurship
- ▶ Corporate Governance

- ▶ Advertising Management
- ▶ Sales Force Management
- ▶ Consumer Behaviour
- Marketing ResearchBrand Management
- Using New Media Technologies in Marketing

# Organisational Sciences

▶ Human Resource Management



## **Management Science**

The four-year BSc (Honours) in Management Science programme is designed to develop students with a strong foundation in decision methods and data analytical techniques in business management. A strong technical foundation will allow students the opportunity to pursue graduate studies or a professional career involving the application of business and data analytical skills.

#### **CORE COURSES**

6 COURSES



- ► 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**





- ▶ Project Management
- ▶ Enterprise Risk Management
- ▶ Financial Economics
- ▶ Investments and Portfolio Management
- ▶ Supply Chain Models
- ▶ Logistical and Transportation Planning Models
- ▶ Production Models
- ▶ Game Theory
- ▶ Data Mining
- ▶ Introduction to Computer Programming
- ▶ Agent Based Modeling
- ▶ Advanced Programming Techniques
- ▶ Database Management
- ▶ Complex Adaptive Systems
- ▶ System Dynamics
- ▶ Consumer Behaviour
- ▶ Marketing Models
- ▶ Personal Effectiveness
- ▶ Brand Management
- ▶ Advertising Management
- ▶ Retail Management

Students will also have the option to work on a senior project and/or complete a semester-long internship in order to fulfill the requirement for Management Science electives.



(PKR) **49,000** 

HIGHEST INTERNATIONAL SALARY

(PKR) **381,510** 

HIGHEST LOCAL SALARY - SDSB

### **Multidisciplinary Modes of Teaching**

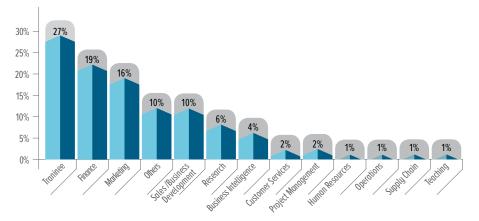
SDSB offers a unique blend of multidisciplinary modes of teaching that fully utilise modern teaching techniques with practical exercises and conventional lecture method. Projects, internships, class exercises, business games and industrial visits are the best examples of the teaching tools employed by instructors to enhance knowledge and provide first-hand experience to its students.



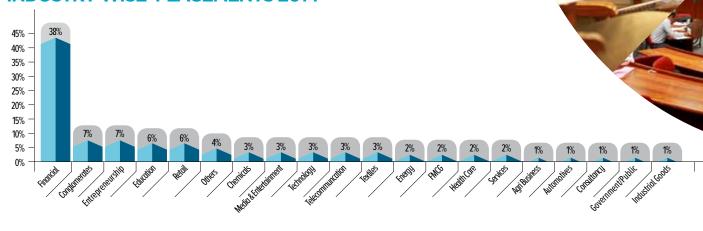
### **▲ L Career Prospects**

SDSB undergraduates have a sound understanding of business models and technical skills which coupled with their ability for sustained hard work under pressure, leadership potential and ability to think outside the box, makes them a prime choice for employers.

#### **FUNCTION-WISE PLACEMENTS 2014**



#### **INDUSTRY-WISE PLACEMENTS 2014**





# MUSHTAQ AHMAD GURMANI SCHOOL OF HUMANITIES & SOCIAL SCIENCES

(MGSHSS)



"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, hardworking 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."

#### MARIA HASSAN

Maria Hasan (Batch 2007) Major: Social Sciences MSc (LSE, London) MA (Tufts University) Works for the United Nations

#### **MULTIDISCIPLINARY EXCELLENCE**

The Mushtaa Ahmad Gurmani School of Humanities and Social Sciences (MGSHSS) enjoys a strong reputation of academic excellence. Its departments of Humanities & Social Sciences and Economics are considered the strongest in Pakistan. The school focuses on a multidisciplinary approach, imparting high quality liberal arts education, which exposes students to a wide range of subjects including History, Philosophy, Sociology, Anthropology and Literature, in addition to those from the Economics discipline. The faculty holds impressive credentials from leading international universities and includes acclaimed experts and scholars with significant publications to their credit. At the national level MGSHSS has contributed greatly to the country's repertoire of superior multidisciplinary education in humanities and social sciences.

The aim of the School is to explore and explain the human aspects of the world. Home to a number of distinct disciplines, including Anthropology, Economics, Literature, Philosophy, History, Political Science, Psychology, and Sociology, the School plays a significant role in the undergraduate programmes at LUMS. While the School is engaged in the process of developing courses in the core ideas of each discipline, it also retains an interdisciplinary focus, exploring connections among traditional

disciplines. Its faculty members have diverse research interests and backgrounds, and hold advanced degrees from some of the leading universities of the world, including: Berkeley, Cambridge, Chicago, Cornell, Colombia, Drew, Duke, Harvard, Johns Hopkins, Kent, Leeds, LSE, Manchester, McGill, Oxford, SOAS, Sorbonne, Sussex, Syracuse, UCL and Virginia. Many members of the faculty are internationally recognised and widely published scholars who have distinguished themselves in their areas of expertise.

The distinctive quality of the education imparted to the students in this department equips them with a valuable skill set of critical thinking and analysis, imagination, reasoning and communication. These skills are increasingly necessary in a globalised world in order to excel at various things including a diverse nature of employment, assuming leadership and decision making roles, and making valuable contributions to local and global communities. Sectors which hire the School's graduates include multinational companies, financial institutions, manufacturing and services industry, social and development sector, education and media. Students are encouraged to follow their passions and aspirations when choosing their area of study.



# BSc (Honours)

#### **BA (HONOURS)**

History

English

#### **BSC (HONOURS)**

Anthropology & Sociology

**Economics & Politics** 

Economics

Political Science

In addition, students may choose a further specialisation in the form of a Minor in any of the following subjects:

Anthropology & Sociology

History

**Economics** 

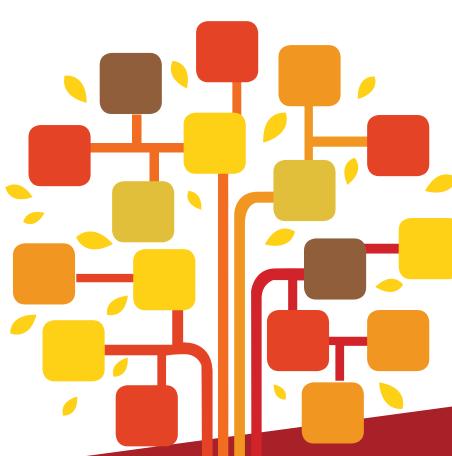
Philosophy

English

**Political Science** 

Psychology

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.







"The Anthropology / Sociology programme at LUMS helped me to master an array of theoretical approaches for the study of human societies. I became acquainted with cultural contexts that are different from my own. I developed an academic perspective that engages, appreciates and respects other religions and societies. It enabled me with a problem solving perspective: evaluating and elaborating arguments, tackling challenging ideas, designing and conducting academically and ethically sound research."

#### KHURRAM RASHEED

Anthropology and Sociology (Batch 2012) Technology Upgradation and Skill Development Company (TUSDEC)

# Anthropology and Sociology

The Anthropology and Sociology major encompasses the comparative study of human beings and the societies they live in. These twin disciplines rely upon qualitative and quantitative research to fulfill this basic aim, and to contribute to our understanding of religions, economies, gender, kinship systems, and political and legal formations as they exist across time and space in order to promote an integrated understanding of human beings living within particular socio-cultural contexts.

The programme is also committed to providing undergraduates the opportunity to undertake their own research through a special project in Anthropology and Sociology. While this is rare in most undergraduate courses, LUMS has been successful in encouraging students to do fieldwork during their stay at the University. As a result, students have the option of undertaking a substantial place of field based research as part of the Anthropology and Sociology programme.

#### **Economics**

The Department of Economics is a growing and vibrant department that brings together quality faculty and student body. Having built its reputation as the premier institution for economics education in Pakistan, the department aspires to establish itself as an internationally recognised centre of theoretical and applied research in economics.

Studying Economics allows us to deal with some of the most crucial questions facing us today; questions of growth, prosperity, equity, globalisation and the role of government. The relevance of this discipline for all societies cannot be over-emphasised and it is even more significant for a developing society, striving to achieve equitable and sustainable economic growth.

# **Economics and 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.

#### **English**

The study of literature in English is one of the most rigorous and enlivening scholarly exercises an undergraduate student can engage in.

The English major at LUMS, an innovative and cutting-edge programme, seeks to train its students to ask questions that have a global resonance. By honing their skills in close reading, rhetoric, critical analysis, and contextual thinking through a curriculum whose methodology is rich in critical theory, the English major will produce broadly educated and multifaceted graduates. The craft of research and knowledge of the great intellectual debates on literature and criticism make up

the backbone of the English major. Students will be trained in issues that range from the implications of a single word in a text such as Homer's Odyssey to the particular social and historical contexts within which literary works come into being. Why is it that a writer from modern-day Kenya or Pakistan chooses to write in English? What does it mean to "write back?" Students will attempt to account for the enduring resonance of particular works—novels, plays, poems—which continue to speak to us across the boundaries of time and space. Engagement with literature facilitates a process of self-discovery and helps extend our understanding of the human condition.



**AVERAGE** SALARY

(PKR)

46,000

HIGHEST **LOCAL** SALARY

(PKR) **120,000** 

HIGHEST **INTERNATIONAL** SALARY

(PKR) **414,303** 

#### **COURSES ARE OFFERED IN FIVE AREAS:**

British Literature	Creative Writing	
American Literature	Literatures in Translation	
World Anglophone Literature		



"Having taken Philosophy courses such as Scientific Imagination, Space and Power, History courses such as War, Society and Memory (a seminar course) and Literature courses such as Mystical Poetry from the Arabic, Persian and South Asian Traditions -LUMS has offered 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, war, sufism, scientific philosophy and so much more; not only, thus, have I learned from the best instructors that this country has to offer, but it is in interacting with my peers that true learning has taken place."

#### NEHA RAHEEL Batch 2014 Major: Humanities [focus on Philosophy & History]

#### **History**

A BA (Honours) in History equips a student with critical analytical tools. Besides a broad-based knowledge of the past, a student of History shall have read seminal historical texts, be knowledgeable about important scholarly contributions in her/his area of specialisation, have developed the skill to read carefully, be able to argue - both orally and in writing - with power and conviction. A student of History would also be cognizant that the discipline requires patience, rigour and extreme attention to detail before any substantive claim to knowledge can be made. Finally, appreciation of History inculcates a life-long love for learning that contributes to our individual and collective selves in ways that are impossible to quantify.

The history faculty at LUMS has received formal training in research methods and analysis in their respective specialist areas, and is research active in these areas.

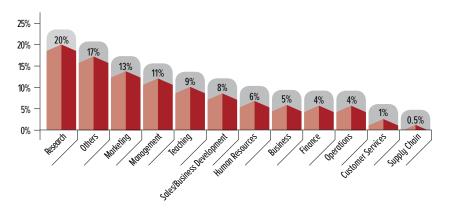
By its very nature history is cross-cultural and global in its outlook. The History major is thus an ideal course of study for anyone considering a career in diplomacy, scholarship and teaching, politics, public service and in international organisations such as the United Nations.

#### **Political Science**

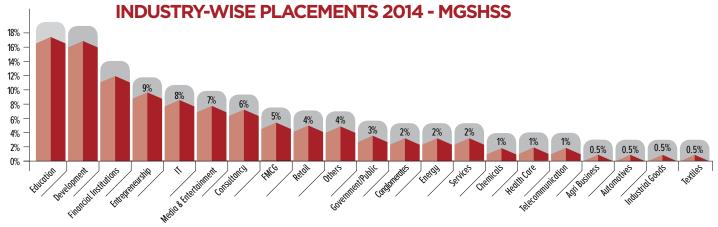
Political Science is traditionally divided into five major subfields: Political Theory, Comparative Politics, International Relations, Public Policy (Policy Analysis or Government) and Political Sociology. The curriculum in Political Science offers an opportunity to specialise in each of these subfields. However, at LUMS, there are several areas of research that cut across the purview of the traditional subfields. This is why the LUMS Political Science curriculum also offers the students the opportunity to engage with the rest of the Social Science curriculum so that they can meaningfully benefit from a broadbased, inter-disciplinary education.

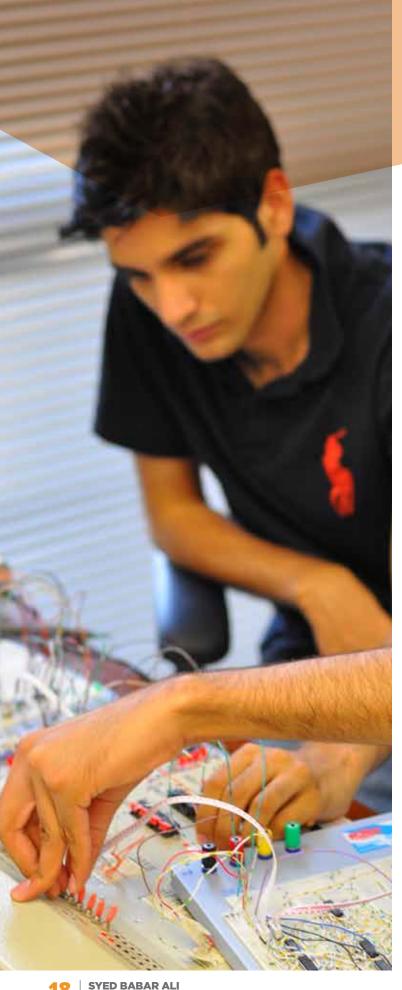
There are several career options open to students who graduate with a concentration in Political Science. The analytical and critical thinking skills, multicultural sensitivity and international outlook gained from an education in Political Science are all traits that are widely sought after by employers in many fields. Careers that build directly on Political Science include employment in academia (research and teaching), Civil or Foreign Service and international organisations such as the World Bank, the United Nations, as well as NGOs.

#### **FUNCTION-WISE PLACEMENTS 2014 - MGSHSS**









# SYED BABAR ALI SCHOOL OF SCIENCE & ENGINEERING

(SBASSE)

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 practised by some of the best universities in the world.

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 a '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 guest 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 and health care. 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.

### **Bachelor of Science (BS) Degree**

The four-year undergraduate programme offers a choice of degrees in the following areas:

**BIOLOGY CHEMISTRY**  **COMPUTER SCIENCE** 

**MATHEMATICS PHYSICS** 

**ELECTRICAL ENGINEERING** 

All students admitted to SBASSE are put through a common "core curriculum" in their first year and part of second year, which is comprised of fundamental courses in Biology, Chemistry, Computer Science, Mathematics and Physics. Students declare their major towards the end of the first year 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.

Department of Biology consists of nine full-time and several visiting/adjunct faculty members who are actively involved in pedagogy and research. Additionally, there is also a team of Research Assistants and Postdoctoral Fellows who not only actively contribute to the teaching of freshman and junior level laboratory courses but also spend a significant fraction of their time working on research projects and supervising senior students in their terminal year projects.

The success of the Biology programme is reflected in the placements of its graduates many of which have won fully funded PhD studentships at multiple top-tier universities which include Dartmouth, Harvard, Cornell, UIUC, UPenn, University of Chicago, Texas A&M, and McGill.



#### **Chemistry**

The Chemistry programme at LUMS emphasises the commercial and industrial applications of chemistry and actively promotes and participates in developing industry-academia research projects.

The programme at SBASSE is designed to give students a grasp of the basic principles of Chemistry through variety of courses that impart fundamental concepts of Chemistry, modern synthetic and analytical techniques, and materials science with special reference to nanomaterials and their applications. This theoretical background is further augmented through carefully designed laboratory courses in chemical procedures and techniques that cover basic concepts and experimental techniques that serve as a stepping stone to conducting research.

In the senior year, all students must carry out research projects in areas of their choice under faculty supervision. Research projects offered by the various members of Chemistry faculty to students include synthesis and characterisation of organic and inorganic compounds/materials, multifunctional metal oxides with interesting electronic and magnetic properties, size and shape-controlled nanomaterials with controlled surface chemistry, functional polymers, thermally stable flexible and hard coatings, nanocomposites, novel catalysts.

Being very research-active, the Department continues to improve its laboratory facilities and has a number of on-going collaborations with some of the leading laboratories in North America, Europe and China.

The success of the Chemistry undergraduate programme at SBASSE is evident from the placement of its BS graduates in some of the best universities in the world including Cornell University, University of Illinois at Urbana Champaign (UIUC), Carnegie Melon University (CMU), University of Massachusetts at Amherst, University of Minnesota and Arizona State University.



"What binds us all together at SBASSE is our passion for science. To me SBASSE is a family that appreciates and understands the importance of science, advancement in technology and research. Our programme is hard core and a rigorous one. We have some of the best faculty members not only in Pakistan but in the world. The students are brilliant and hard working. Our staff is excellent. The atmosphere is friendly and our network is a tight one. We started off from scratch, and we will break records!"

#### **WAQAS RASHEED**

Batch Of 2013, Chemistry Currently at University of Minnesota, USA



### **Computer Science**

The undergraduate programme in Computer Science offers an excellent learning opportunity to students with the help of 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) and how to design more efficient computing algorithms (theory of computation).

With a CS degree, students can launch their own technology start-up, work in the 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 diverse 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 Berkeleu. 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 and Eyedeus Labs) have become leading market names.

# **Electrical Engineering**

Electrical Engineering is a progressive and dynamic branch of engineering that deals with devising large- and small-scale systems that function using electricity and electronic devices. The overall discipline focuses on the principles, design and applications of electrical and computer technologies, as well as on the integration of components into complex systems. Domains of electrical engineering include telecommunications, electronics, control, bio-medical, power,

image and signal processing, optics and devices. Students enrolled in this undergraduate programme learn through a combination of design and lab work. The core and elective courses cover the essential depth and breadth needed for contemporary professional practice. They also prepare students to contribute to the rapidly changing needs of technology. Important concentration areas of research include: Communications, Signals and Systems, Electronics and Embedded Systems, Devices, Optics and Electro-Magnetics and Modern Power & Energy Systems.



#### **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 seeks to establish truth through abstraction and formal logic. Pure and Applied Mathematics are the two main branches of this discipline. Whereas pure mathematics deals with abstract problems, applied mathematics solves practical problems in various areas including science, engineering, finance, economics, medicine and business. Department of Mathematics offers a variety of courses in both pure and applied areas, which prepare students adequately for future endeavours. The curriculum is rigorous and taught by excellent faculty, majority of which is very research active. Many of the BS graduates are currently pursuing their graduate education in top-tier institutions while others are working for some of the best corporations in Pakistan and abroad.

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



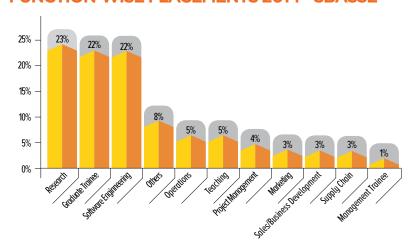
The Department of Physics has an outstanding teaching and research environment. Current research activities include probing the fundamental physical aspects of universe and the underluing mathematical structures, as well as novel applications in diverse areas, including nanoscience, optics, nanophotonics,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

There are active collaborations that our faculty and students enjoy 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 Electro-communications, Tokyo. Our students are also actively involved in summer research programmes both at LUMS and other institutes in Pakistan and abroad (e.a., Summer Exchange with CERN) and contribute to various outreach activities. Our teaching 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.

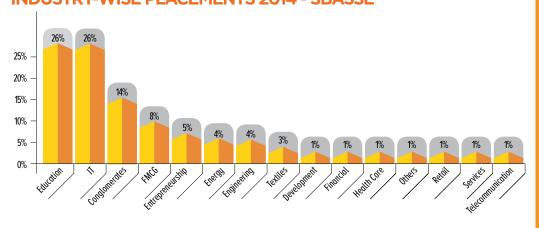
The Department of Physics has transferred several indigenously-developed physics teaching demonstrations and experiments to Habib University, Nusrat Jahan Degree College, Institute of Space Technology, GIK Institute of Engineering Sciences and Technology, and Preston University.



#### **FUNCTION-WISE PLACEMENTS 2014 - SBASSE**



#### **INDUSTRY-WISE PLACEMENTS 2014 - SBASSE**







# SHAIKH AHMAD HASSAN SCHOOL OF LAW (SAHSOL)

In 2013 LUMS announced the launch of the Shaikh Ahmad Hassan School of Law (SAHSOL), as its fourth school. A stand-alone building for the school is under construction. The Shaikh Ahmad Hassan School of Law has grown out of the Department of Law & Policy, which has been functioning since 2004 and offers a 5-year joint B.A-LL.B undergraduate programme, a degree accredited by the Pakistan Bar Council.

The B.A- 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 a 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.

SAHSOL would create innumerable ripples across the entire social, political and economic fabric. 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.

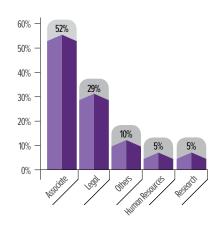
#### Teaching Methodology

The teaching methodology encompasses a critical and comparative approach to broaden the perspectives and sharpen the analytical skills of the students. Additionally, the ambit of studies is not just laws as they exist and operate, but also how policy impacts laws and how law and policy interplay. The mode of teaching involves legal text and case analysis and employs the 'Socratic Method', supplemented by teaching tools such as active class participation, seminars, law moots, role playing, and field studies. This methodology emphasises students' participation and discussion in order to develop their critical reasoning and graumentation abilities which also enriches the class atmosphere.

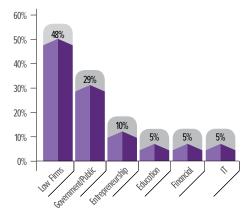
#### **Career Prospects**

The Law and Policy programme's graduates are currently pursuing Master's in Law from the highly prestigious universities of Berkley, Cambridge, Columbia, Harvard and Michigan. Others 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.

# FUNCTION-WISE PLACEMENTS 2014 - SAHSOL



# INDUSTRY-WISE PLACEMENTS 2014 - SAHSOL





HIGHEST **LOCAL** SALARY

(PKR) **70,000** 

# UNDERGRADUATE PROGRAMME MINORS

A University 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.

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 OFFERED IN A RANGE OF DISCIPLINES

Anthropology/Sociology	Computer Science	Literature in English	Physics
Biology	Economics	Mathematics	Political Science
Chemistry	History	Philosophy	Psychology

## **FACILITIES AT LUMS**

## CAMPUS AND FACILITIES

The LUMS campus is spread over 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 facilities. The Allama Igbal 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 excellent classrooms, an up to date library, state-of-the-art laboratories, on-campus housing, a mosque and integrated sports and recreational facilities.

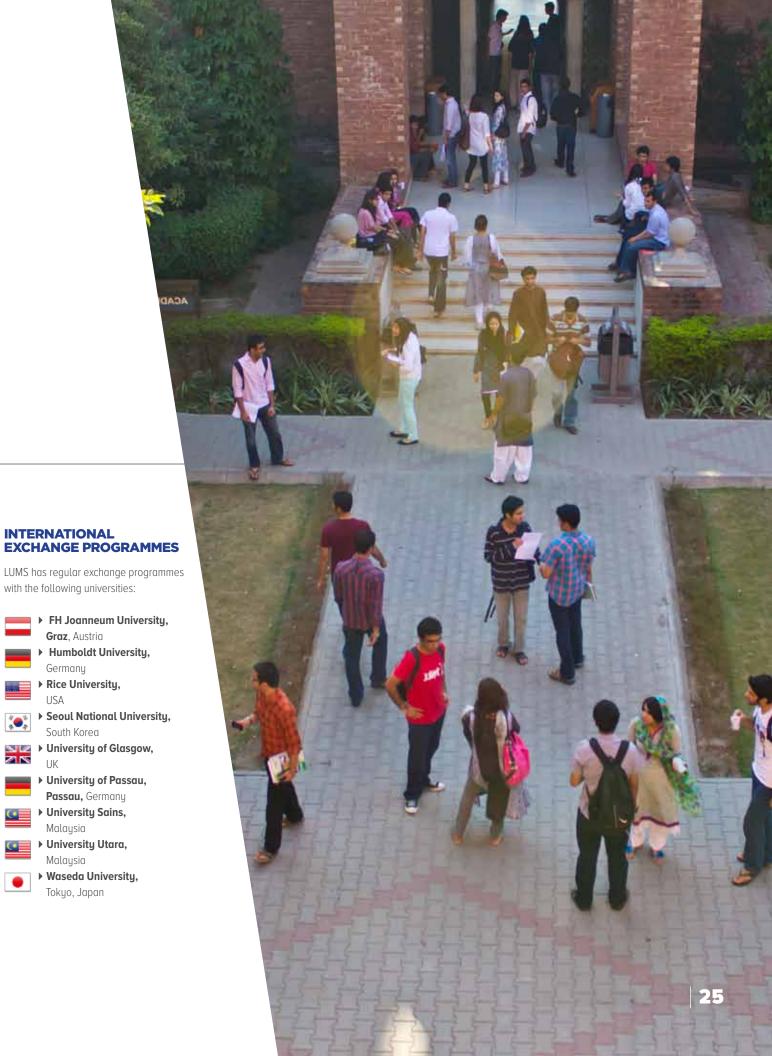
## GAD & BIRGIT RAUSING LIBRARY

The Gad & Birgit Rausing Library at LUMS offers advanced systems and technologies and a wide array of user empowered services. It has a rich and assorted collection of over 220,000 books and 140,000 electronic books that support scholarly interests and practical research activities, 450 print journal subscriptions, more than 35,000 electronic journals, a collection of 3200 resources, including audio and video libraries, 40 CD-ROM databases and campus-wide access to more than 35,000 online journals dating back to the 1800s. The library allows free and secure access to library catalogues, user accounts and campus-wide access to its full text resources through a web interface called iPortal. Through this, members can manage their library accounts and keep tabs on circulation activities including renewals or reservations of circulated items. Another useful service provided by the library is Selective Dissemination of Information (SDI) which keeps members updated about new additions to the library collection. Besides remote access, the library remains operational seven days a week until midnight and is open 24 hours a day during exams.

## **STUDENT SOCIETIES**

Students are encouraged to take part in a number of student run clubs or societies, catering to a diverse range of interests. Whether it is the LUMS Adventure Society (LAS), the LUMS Entrepreneurial Society (LES), the LUMS Model UN Society (LUMUN), or Sports at LUMS (SLUMS), students are made to feel part of the LUMS community through a wide range of activities arranged by the societies.

100 acre secure campus



USA

# FINANCIAL ASSISTANCE

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.

From its very 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 assistance packages to qualifying students in all its degree programmes and since inception has disbursed more than PKR 2.2 billion in financial assistance to its students.

Currently about 40% of the students at the university get some form of financial assistance from LUMS based on the assessed financial need. During the academic year 2013-2014, LUMS disbursed more than PKR 350 million as financial aid to its students. A large number of financial assistance 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 & Need Based Scholarship Programme and various named scholarships. However, the bulk of the financial assistance at the undergraduate level is given via the following two programmes:







#### **LUMS Financial Assistance**

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 assistance is offered to students with demonstrated need. These awards at the undergraduate level are available in the form

of tuition fee waivers and do not have to be repaid. They cover partial to full tuition fee expenses of the programme. The range of the amount of financial assistance over the last year has been between 20% and 100%. These awards are reassessed in each academic year based upon performance and demonstrated financial need.

#### **National Outreach Programme**

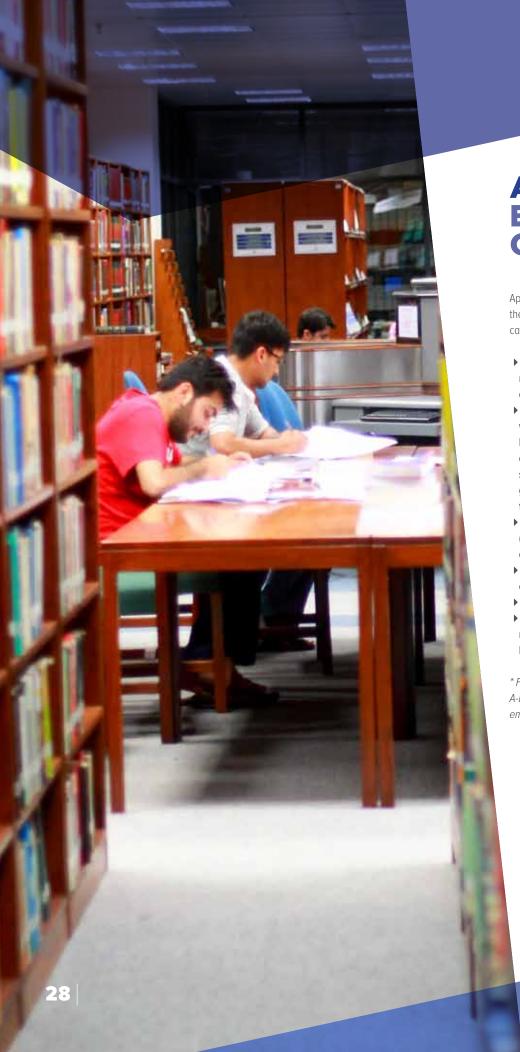
The National Outreach Programme (NOP) is a LUMS initiative to promote and cultivate the local talent and potential of Pakistan, especially from the lowest income households.

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 Assistance applications are processed after a student has been accepted into the programme and have no bearing on admission. Financial assistance 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 assistance and all awards are reassessed each academic year based on performance, need and prevailing University policies.



# ADMISSION ELIGIBILITY GUIDELINES

Applicants are eligible to apply for admission if they fulfill one of the following academic qualifications:

- ➤ Successful completion of Matric (60% marks or above) and FA (60% marks or above)/FSc/ICS/ICOM (65% marks or above)
- ▶ O' Levels results (in at least 6 subjects) with an average grade of at least 'C'and A' Levels in at least 3 \*principal subjects with at least 2 Bs and 1 C grade such that there should be no more than 1 C grade and no grade less than a C. No credit will be given for General Paper.
- American High School Diploma (HSD) (65% 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, principal subjects for A-level are Biology, Chemistry, Computing, Mathematics, Further Mathematics and Physics

#### **Admission Test**

#### SDSB/MGSHSS/SAHSOL

The SAT Reasoning Test is mandatory for all applicants applying to the Suleman Dawood School of Business (SDSB), Mushtaq Ahmad Gurmani School of Humanities & Social Sciences (MGSHSS), Shaikh Ahmad Hassan School of Law (SAHSOL). SAT Registration can be done online through the following link: https://www.collegeboard.org.

All applicants must successfully submit their complete online admission application on or before **February 17, 2015, 5:00 pm** (Pakistan Standard Time).

Applicants are strongly encouraged to take SAT by January 24, 2015.

On a space available basis, students taking SAT in May 2015 will be considered for the "Second Round" of admission.

#### **SBASSE**

Applicants applying to the Syed Babar Ali School of Science and Engineering (SBASSE) are required to take the following admission tests in order to be considered for admission:

#### 1. SAT Reasoning Test and

2. LUMS SBASSE Subject Test or SAT Subject Test in at least 3 of the 4 SAT II subjects listed below, (applicants opting for SAT II are not required to take LUMS SBASSE subject tests):

Biology-M

Chemistry

Mathematics II-C

Physics

#### I - SAT Reasoning Test

SAT registration can be done online through the following link: https://www.collegeboard.org.

Applicants must successfully submit their complete online admission application on or before **February 17, 2015**, **5:00 pm (Pakistan Standard Time)**.

In order to be considered for the "First Round" of admissions applicants are required to take the SAT Reasoning Test and SAT Subject Test in three subjects mentioned above (if opting for SAT subject tests) latest by January 24, 2015.

On a space available basis students taking SAT Reasoning Test and SAT Subject Test in three subjects mentioned above (if opting for SAT subject tests) in May 2015 will be considered for the "Second Round" of admission.



#### **II - LUMS SBASSE Subject Test**

In addition to SAT Reasoning Test, if the applicant does not wish to take SAT subject Tests then subject knowledge in the area of Biology, Physics, Advanced Mathematics & Chemistry will be evaluated through the LUMS SBASSE subject test. Questions are designed to explore knowledge and skills acquired over a period of time. The test is designed to compare candidates with different academic backgrounds.

The SBASSE Subject Test Registration can be done through the LUMS online application system at: http://admissions.lums.edu.pk on or before **February 17, 2015, 5:00 pm** (Pakistan Standard Time).

#### **Fee Structure**

Undergraduate tuition fee at LUMS is based on credit hours. For 2015-16 the cost per credit-hour is PKR 21,000.

The actual cost of studying at LUMS will vary by student depending on degree and course loads, on-campus

accommodation, year and indirect expenses such as books, supplies, transportation, personal expenses, etc. and any financial aid received.

	PKR
Admission	58,800
Security (Refundable)	16,000
Registration	37,500
Tuition Fee	504,000
Total SDSB/ MGSHSS/SAHSOL	616,300
SSE Lab Charges	9 7,000
Total SBASSE	713,300

